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Before the
Federal Communications Commission
Washington, D.C. 20554

MM Docket No. 88-140

In the Matter of

Amendment of Part 74 of the
Commission's Rules Concerning
FM Translator Stations

RM-5416

RM-5472

NOTICE OF PROPOSED RULE MAKING

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By the Commission: Commissioner Duggan not participating

TABLE OF CONTENTS

	Paragraph
INTRODUCTION	1
BACKGROUND	2
DISCUSSION	6
Service Issues	
Ownership restrictions	9
Coverage area	21
Financial support	25
Fundraising by translator	30
Local program origination authority	34
Local service obligations	47
Signal delivery	50
Use of auxiliary frequencies	54
Conditional relaying	59
Need requirements for translators	63
Method for selecting among applicants	67
Definition of major change	72
Multiple ownership limits	76
Cross-service translating	80
Technical Issues	
Frequencies available to FM translators	84
Maximum output power	87
Antennas	99
Standards for directional antennas	103
Interference criteria	106
TV channel six interference	114

Other matters

Grandfathering criteria for existing translators 119
Revised rule section 123

Administrative matters 124

Appendix A: Commenters

Appendix B: Proposed Rule Section

Appendix C: Initial Regulatory Flexibility Analysis

INTRODUCTION

1. On March 24, 1988, the Commission adopted a *Nouce of Inquiry (NOI)*, 3 FCC Rcd 3664 (1988), to study the role of FM translators in the radio broadcast service. Therein, we sought comment on all aspects of our general policies regarding FM translators, as well as specific proposals for revisions to our rules regarding the authorization and operation of FM translators. By this *Nouce of Proposed Rule Making (Notice)*, we propose to amend the rules governing the FM translator service based on the comments submitted in response to the *NOI* and our own analysis of the translator service. We propose to restructure our FM translator rules consistent with the intended purpose of this service, which is to provide supplementary service to areas in which direct reception of radio broadcast stations is unsatisfactory due to distance or intervening terrain barriers. In particular, we propose to revise and clarify the FM translator rules, including new rules for: ownership and financial support of translators; methods for selecting among translator applications, the definition of "major change" in translator coverage areas; use of commercial, noncommercial and auxiliary band frequencies, interference criteria; and technical requirements for translators.

BACKGROUND

2. FM translators are stations that receive the signals of FM radio broadcast stations and simultaneously retransmit those signals on another frequency.¹ In general, the signal of the FM radio broadcast station being rebroadcast² must be received directly over-the-air at the translator site.³ FM translators were first authorized in 1970⁴ as a means to provide FM service to areas and populations that were unable to receive satisfactory FM signals due to distance or intervening terrain obstructions.⁵ While the Commission recognized the benefits of authorizing FM translator service, it also expressed concern regarding the possible competitive impact such translators could have on FM radio broadcast stations and the effect their authorization could have on the licensing of those stations.⁶ Thus, the Commission elected to authorize FM translators on a secondary basis only and imposed rules that restrict their service, ownership, financial support and program origination.⁷ The FM translator rules currently in effect are essentially the same as those adopted in 1970.

3. Seven parties submitted petitions for rule making seeking various, sometimes conflicting changes to our FM translator rules.⁸ In its petition, the National Association of Broadcasters (NAB) requested the Commission to impose financial support and profit-making restrictions on FM translators to prevent their use by FM radio broadcast stations to expand their service areas. The NAB also asked

the Commission to tighten the technical rules to prevent interference from translators to FM radio broadcast stations. The other petitioners generally sought expansion of the current translator service, including program origination authority.

4. NAB's petition indicated that there is considerable concern about the adverse impact of FM translators upon FM radio broadcast stations under the existing rules, while other petitioners expressed an interest in new and expanded uses of FM translators. In light of the concerns and interests expressed by the petitioners on both sides of this matter, we concluded that a broad reexamination of our FM translator regulatory scheme would be timely and appropriate. Accordingly, we adopted the *NOI* to initiate a reevaluation of FM translator rules and policies. Therein, we sought comment on the appropriate regulatory structure for the authorization of FM translator stations. However, at the outset, we emphasized that in undertaking this reevaluation of the FM translator service, we did not intend to alter our basic approach of authorizing FM translators for the purpose of providing service that is supplemental to the service provided by FM radio broadcast stations. Within this context, commenters were asked to consider whether there is any need to modify our rules to ensure that translator stations do not adversely affect the operation of FM radio broadcast stations. In the *NOI*, we also stated that we would consider policy options for expanding FM translator authority to the extent that such policies would be consistent with the secondary nature of this service.

5. Fifty-six parties filed initial comments in response to the *NOI*, and 15 parties replied.⁹ Subsequent to the formal comment period, NAB filed a study of radio listener behavior based on data that were not available during the original comment period. Since we believed that the NAB study included relevant information, we reopened the proceeding to solicit comments on it.¹⁰ We received 13 comments and 23 reply comments regarding the NAB study.

DISCUSSION

6. We continue to believe that the proper role for FM translators is that of a secondary service intended to supplement the service of FM radio broadcast stations.¹¹ Thus, we will continue to adhere to the policy that the purpose of FM translators is to provide service in areas in which direct reception of radio service is unsatisfactory due to distance or intervening terrain obstructions. At the same time, the petitions for rule making regarding translator matters now before us make this an appropriate time to reevaluate the existing rules for the authorization and operation of FM translators. In particular, we want to examine the existing regulatory structure to determine if it provides the best means for the implementation of our policy goals. On the one hand, we seek to consider whether the existing regulatory scheme, or another providing more stringent regulation, would best serve to ensure the availability of the optimal amount of quality radio service to the public. Alternatively, we believe that some expanded uses of FM translators might be consistent with the supplementary role of the service and should be examined more closely to determine whether they would benefit the public.

7. After review of the comments submitted in response to the *NOI* and our own analysis of translator matters, we tentatively conclude that our existing regulatory structure no longer satisfies the intended purposes of the FM translator service. We find that there is a need to clarify and tighten several rules in order to ensure that FM radio broadcast stations are not adversely impacted by translator operations. We also have determined that several of our rules can be modified in order to better serve the public. Because of the complexity of this undertaking, this *Notice* examines each of the existing FM translator rules and policies separately. Below we describe the current rule or policy, summarize the comments received in response to the *NOI* and set forth our proposal to retain, to modify or to eliminate the current rule.¹²

8. We believe that the rules proposed here will establish a regulatory framework consistent with our commitment to provide FM radio service through FM radio broadcast stations supplemented by a translator service. We believe that adoption of the proposals discussed below will facilitate the delivery of improved radio service to the public through the use of FM translators. Parties are requested to consider each of our proposals. We also intend to consider alternative proposals submitted by commenters. Following our analysis of the comments received in response to this *Notice*, we will adopt those rules that will best serve the public interest.

SERVICE ISSUES

Ownership restrictions

9. In authorizing FM translators initially, the Commission was concerned about the potentially adverse impact this service could have if FM radio broadcast stations expand their service areas into other stations' service areas.¹³ Therefore, the Commission adopted rules restricting the ownership of commercial FM translators by the FM radio broadcast station being rebroadcast. A licensee of a commercial FM radio broadcast station is prohibited from owning and operating FM translators which intend to provide service beyond its predicted 1 mV/m contour, if such service is within the predicted 1 mV/m contour of another commercial FM station licensed to a different community.¹⁴ This means that a commercial FM station licensee may own and operate FM translators serving areas within its own predicted 1 mV/m contour for the purpose of filling in signal reception where its signal is impeded by geographic obstruction. In addition, commercial FM radio broadcast stations may become licensees of translators to serve areas beyond their 1 mV/m contour where there is no other predicted FM service.¹⁵

10. The licensee of an educational (NCE) FM radio broadcast station is not subject to any restrictions regarding the service area of any translators it owns and operates, if the signal is transmitted over-the-air from the primary station to its translators. A recent Commission action amended the signal delivery rules for commonly owned and operated NCE FM translators assigned to the reserved frequency band (channels 200-220) to permit the use of alternative signal distribution technologies. In such cases, an applicant for a translator proposing to serve a particular area is required to meet certain conditions before its application can be accepted.¹⁶

11 Independent parties are also eligible to become FM translator licensees for stations that are intended to rebroadcast either commercial or NCE FM stations.¹⁷ Under existing rules, there are no restrictions on the ownership of FM translators by independent parties since their interest in establishing such translators is indicative of a need for supplemental FM service.¹⁸ Thus, independent parties may be licensed to operate FM translators providing service to areas within or outside the 1 mV/m contour of the FM radio broadcast station being rebroadcast.

12 In the *NOI*, we sought comment on the need to modify the restrictions on ownership by an FM radio broadcast station of a translator providing service to the 1 mV/m area of another FM radio broadcast station. We asked commenters to provide information regarding the extent to which translators licensed under the current rules may be operating beyond their intended role as providers of service to areas where reception is unsatisfactory due to distance or intervening terrain obstructions. As a related matter, we requested comment on NAB's proposal to tighten the ownership rules to prohibit any use of translators that would extend a primary station's signal into the coverage area of another FM radio broadcast station, and asked commenters to provide information on the extent to which translators operating under the current rules might be providing needed service.

13 *Comments* Commenters representing broadcast interests generally support NAB's proposal to limit FM radio broadcast station ownership of translators to providing fill-in service within the station's authorized protected contour.¹⁹ These parties also state that only community groups should be permitted to own translators in unserved areas. Furthermore, NAB suggests that an FM radio broadcast station can use booster stations if it wishes to provide fill-in service to areas unable to receive its signal, due to terrain or other obstructions within its contour.²⁰

14 Other commenters support further restrictions on translator ownership by independent parties. NAB proposes limiting independent party translator ownership to cases in which the translator would provide service to areas not within the 1 mV/m contour of any existing commercial FM radio broadcast station. Furthermore, NPR contends that the Commission should require independent party translator applicants (*i.e.*, those owners other than the licensee of the FM radio broadcast station rebroadcast on the translator) to demonstrate a nexus to the community to be served by the translator. It asserts that this requirement would be consistent with the Commission's original intent to limit translator ownership to the primary station, local citizens, or "qualified organizations representing the inhabitants of the translator's service area." *Notice of Proposed Rule Making*, "Operation of Low-Power FM Broadcast Translator and Booster Stations," 34 FR 761, 762 (Jan. 17, 1969).

15 Other parties support a rule change authorizing FM radio broadcast stations and independent parties to own translators without restriction.²¹ They comment that the marketplace should determine the location and ownership of FM translators in order to maximize the availability of programming. Further, La Tour observes that there have been no adverse effects on NCE FM stations in the absence of ownership restrictions for NCE FM translators.

16. Several commenters recommend that the Commission include a definition of "underserved" in the rules. NAB suggests defining underserved areas as those not within the 1 mV/m contour of any existing commercial FM station.²² Tucson Broadcasters Association (TBA) suggests that the definition of "underserved" could be based upon a ratio between the population and the number of available signals in the area, *e.g.*, the number of stations on the air and the total number of allocations for the area. Byron W. St. Clair (St. Clair) would define "underserved" as any area with less than six commercial 0.5 mV/m signals.

17. *Proposal* We propose to classify FM translators into two categories.²³ The first category includes FM translators providing "fill-in" service -- *i.e.*, the FM translator's predicted 1 mV/m contour is within the protected contour of the primary station. The protected contour of the primary station shall be defined as the predicted 0.5 mV/m contour for commercial Class B FM stations, the predicted 0.7 mV/m contour for commercial Class B1 FM stations, and the predicted 1 mV/m contour for all other classes of FM stations. The second category includes FM translators providing service to "other areas" -- *i.e.*, the FM translator's predicted 1 mV/m contour extends beyond the protected contour of the primary station.

18. With respect to translator ownership, we propose to modify the existing rule which provides that an authorization for a commercial FM translator which is intended to provide reception to places which are beyond the predicted 1 mV/m contour of the primary station and within the predicted 1 mV/m contour of another commercial FM station assigned to a different principal community will not be granted to a licensee of an FM radio station. Our proposed rule states that ownership of a commercial FM translator will not be available to the licensee of an FM radio broadcast station if the predicted 1 mV/m contour of the FM translator goes beyond the protected contour of the primary station.²⁴ Thus, we will continue to allow NCE FM translators to be owned by either FM radio broadcast station licensees or independent parties. Additionally, a commercial FM radio broadcast station will still be permitted to own FM translators whose predicted 1 mV/m contours fall entirely within the primary station's protected contour. Such FM radio broadcast station owned translators are intended to provide fill-in service in areas that the station's signal cannot reach due to terrain obstructions. In this regard, we do not find it necessary to limit an FM radio broadcast station to the use of FM boosters, as suggested by NAB. We believe it is appropriate to allow the licensee the flexibility to determine whether its needs are best met through the use of translators or boosters. Further, we will continue to allow any independent party to apply for an FM translator authorization to serve any area. We request comment on the extent to which our proposed ownership rules are sufficient to prevent unintended uses of FM translators when considered in conjunction with our other proposals discussed below.

19. Consistent with the translator policies that have been in effect for the past two decades, we do not support NPR's proposal to impose additional restrictions on independent party ownership of translators since a relationship to the community to be served by the translator has never been a requirement for independent party ownership of translators.²⁵ Nor do we believe that independent party owned translators should be restricted to areas not

within the 1 mV/m contour of any existing commercial FM radio broadcast station, as suggested by NAB, since our rules permit independent parties discretion in the location of translators. Such restrictions could have a chilling effect on translator applicants, resulting in the diminution of service to the public. We believe that the interest of independent entities to establish such translators is indicative of a need for FM service. Thus, where technically feasible and within the parameters set forth in the other proposed rules, we believe such service should be authorized.

20. We are not persuaded, however, that it is desirable to allow commercial FM licensees to establish translators beyond their protected contours. While the establishment of independent party translators in these other locations appears to indicate a public desire for the programming, FM radio broadcast station owned translators would more likely indicate a station's interest in reaching audiences in areas that lie outside its service area. More generally, we also find that the proposal to eliminate restrictions on FM radio broadcast station ownership of translators conflicts with our belief that the public interest is best served by maximizing service through the use of FM radio broadcast stations. We continue to believe that the most appropriate and efficient means of providing additional FM service nationwide is by creating opportunities for the establishment and development of such stations. We believe that a modification of our rules to permit the expansion of FM service through the use of translators would be inconsistent with our basic FM allocations scheme. Such a change also would be particularly undesirable while we are implementing Docket No. 80-90 through the authorization of new stations in Docket No. 84-231,²⁶ because there might be interference between these new facilities and new translators.

Coverage area

21. The present rules do not contain a definition of an FM translator station's "coverage area." The rules, however, refer to the 1 mV/m field strength contour of the FM radio broadcast station being rebroadcast regardless of its class as the area within which a translator may provide fill-in service.²⁷

22. In the *NOI*, we noted that other rules recognize that the protected contours of commercial Class B and Class B1 stations extend to their 0.5 and 0.7 mV/m predicted contours, respectively.²⁸ We asked commenters to consider whether to remove the 1 mV/m contour restriction entirely, or whether to authorize a 0.5 or a 0.7 mV/m contour to define both the area in which an FM radio broadcast station may build a translator and the area in which it is precluded from building a translator.

23 *Comments.* Greater Media recommends that the authorized service contour for primary stations should remain at 1 mV/m. NAB contends that the current 1 mV/m rule is unfair to Class B and B1 licensees because it permits translators in areas in which FM radio broadcast stations would not be permitted to operate. Therefore, NAB suggests that the rules regarding protected contours recognize the actual contours of Class B and B1 stations. TBA proposes revision of the 1 mV/m contour rule, contending that theoretical protection of the 1 mV/m contour may be insufficient to ensure that FM translators, a secondary service, protect FM radio broadcast station service, particularly in areas of the western United States where

FM radio broadcast stations provide service beyond the 1 mV/m contour in the absence of interference and separations are greater than in the east.²⁹

24. *Proposal.* We believe that, for purposes of the FM translator rules, a primary station's protected contour will be defined as the predicted 0.5 mV/m contour for commercial Class B FM stations, the 0.7 mV/m contour for commercial Class B1 FM stations, and the predicted 1 mV/m contour for all other classes of FM stations. We further believe that it is appropriate to define the coverage contour for an FM translator station. Although this matter was not specifically addressed in the *NOI*, a coverage contour definition will be useful in developing and interpreting our FM translator rules. We therefore propose to define the translator's coverage area as its predicted 1 mV/m contour, whether it is authorized for fill-in service or service to other areas. This will be the area within which an FM translator station can operate and is used for allocation and regulatory purposes, not to impose a minimum service obligation as suggested by NAB. Commenters are requested to address this proposal.

Financial support

25 The current rules provide certain restrictions on financial support of commercial FM translators by commercial FM radio broadcast stations. In particular, we do not grant authority to an independent party applicant who proposes to construct a new commercial FM translator station beyond a primary station's predicted 1 mV/m contour, and within the predicted 1 mV/m contour of another commercial FM broadcast station assigned to a different community if such independent party applicant will receive, directly or indirectly, any financial support or contribution from the primary station for application and construction costs, or any other costs incurred up to the time the translator commences operation.³⁰ However, a primary station licensee may support the operation and maintenance of such a translator after operations commence.³¹ No similar restrictions apply to NCE FM licensees.

26 In the *NOI*, we sought comment on the need to modify the restrictions on support by a primary station of a translator operating within the service area of another FM radio broadcast station.³² We noted that the current rules, restricting support of independent party owned translators by FM radio broadcast station licensees and limiting locally originated messages to those necessary to obtain and acknowledge contributions and advertiser support, were designed to prevent operation of translators as profit-making entities. In light of allegations by NAB and other commenters that translator operators are devising schemes to operate translators as profit-making ventures, we requested specific information on the nature of the purported ventures, the extent to which ambiguities in the current financial support rules subvert their intent and the extent to which translators operated for profit adversely affect the operation of FM radio broadcast stations. We also requested comment on NAB's proposal that we adopt rules to: (1) specifically prohibit profit-making by FM translators; and (2) prohibit primary stations from financially supporting any translators other than those providing fill-in service within their 1 mV/m contour.

27. *Comments.* Broadcast interests generally support NAB's proposal to prohibit third-party translator operators³³ from obtaining financial consideration from primary stations, either prior to or following construction of

the translator.³⁴ In support of its proposal to tighten the financial support rule, NAB argues that ambiguities in the current rule create incentives for translator operators to profit by accepting compensation, including maintenance fees, sale of advertising time (typically on a "barter" basis), or other types of payment, from the primary station.³⁵ In addition, KRXV claims that some primary stations attempt to circumvent the proscription against an FM radio broadcast station establishing a translator within the service area of another FM radio broadcast station by having an independent party apply for the license when, in fact, the independent party is either related to or has agreed to rebroadcast the FM radio broadcast station's signal for a fee or other compensation. La Tour, whose companies lease translators to FM radio broadcast stations for rebroadcast, maintains that there should not be limits on the economic compensation extended to a translator operator from the primary station and that translator service fees should be incorporated into the new rules. He argues that "lease back" agreements, where the primary station financially supports the translator, are in the public interest because they assure that translators will provide unique services.

28 *Proposal* The existing financial support rule explicitly prohibits an operator of a commercial FM translator from recovering construction and application costs by collecting operation and maintenance support from the primary station in excess of actual expenditures. In this regard, a primary station's support of translators serving areas beyond its 1 mV/m contour is limited to the actual cost of operating and maintaining the translator and must not be large enough to reimburse the translator licensee for pre-operation expenses. Thus, the financial burden of establishing a new translator, or purchasing an existing one, is the sole responsibility of the applicant. However, NAB and others assert that such restrictions are difficult to enforce. Therefore, we are proposing to revise our financial support rule to make it easier to enforce and less subject to possible abuse.

29. Specifically, we propose to allow a primary station to support commercial translators providing fill-in service, both before and after the translator station commences operation, but to prohibit a primary station from supporting, directly or indirectly, any commercial FM translators providing service to other areas, both before and after they commence operation.³⁶ We believe the proposed revisions to our financial support rule should remove the ambiguities that have led to the abuses reported in the comments submitted by NAB and others. Commenters are asked to address our proposal. In addition, we solicit comment on the extent to which parties might still circumvent the proposed rule, through "under the table" reimbursements or any other forms of consideration not addressed by the proposed rule, and any specific clarifications that might discourage such activities.³⁷

Fundraising by translators

30. The current rules provide that translators may originate one announcement per hour of up to 30 seconds, to solicit or acknowledge financial contributions made to defray the costs of installing, operating and maintaining the translator station.³⁸ Such announcements are to be made principally for the purpose of acknowledging financial contributions and may include identification of the contributors, the size or nature of the contributions and advertising messages of contributors.³⁹ The licensee of the

translator may not make these announcements "for the purpose of making a profit."⁴⁰ We also wish to make clear that the same restrictions which apply to solicitations by and contributions to noncommercial FM stations are also applicable to noncommercial FM translators.⁴¹

31. In the *NOI*, we stated that the current rules limiting locally originated messages to obtain contributions and advertiser support were designed to prevent use of translators for economic profit. We sought comment on NAB's proposal that we adopt rules allowing only *bona fide* community-sponsored translators to originate messages regarding contributions toward station operation and maintenance, and that we specifically prohibit profit-making on such translators.

32. *Comments.* Broadcast commenters contend that the existing rules authorize independent party owned translators to originate messages, on a non-profit basis, to obtain and acknowledge contributions. While these commenters do not object to limited financial acknowledgments on community-owned and operated translators to offset legitimate operating costs, they urge that the sale of commercial time on translators for profit be explicitly prohibited.⁴² NPR suggests that the lack of an explicit requirement that an individual or organization represent the needs of the community served by the translator has resulted in situations where translators are operated by individuals who "market" the translator operation for profit. Other commenters believe that community-owned and third party owned translators should be permitted to broadcast commercials for profit on an unlimited basis.⁴³ They believe that for-profit use of translators will foster the service, as well as allow advertising tailored to a small area served by small businesses.

33 *Proposal* We propose to retain the existing rule allowing a total of 30 seconds per hour to solicit contributions or to acknowledge contributions. We also propose to clarify the rule to permit announcements for solicitation or acknowledgment of contributions to be split during the hour. Finally, we ask commenters whether our proposed rules concerning fundraising by fill-in and other area translators should be clarified by the inclusion of a definition of what constitutes acceptable solicitations and acknowledgements.

Local program origination authority

34. The current rules limit FM translators to rebroadcasting the signal of an FM radio broadcast station.⁴⁴ Program origination by all translators, commercial and NCE, is prohibited with the exception of origination authority to acknowledge or solicit financial support and to provide emergency warnings of imminent danger.⁴⁵ Moreover, emergency transmissions are limited in time and frequency to that necessary to protect life and property. Furthermore, where the translator is owned by an independent party, written consent is required for the rebroadcast of the FM radio broadcast station's signal.⁴⁶

35. As stated in the *NOI*, our primary goal in this proceeding is to consider regulatory devices that will both promote translator use to provide service to areas in which direct reception is unsatisfactory due to distance or intervening terrain obstructions and to prevent translator operations from adversely affecting FM radio broadcast stations. Several parties submitted petitions for rule making proposing various forms of program origination authority for FM translators.⁴⁷ We noted at the outset that our desire to retain consistency among our overall FM

translator policies mandates that we proceed with caution in contemplating possible expansion of the basic service authorization for FM translators. We are aware of the concerns expressed by NAB and others that expanded operation of FM translators might deleteriously impact FM radio broadcast stations. In addition, we are cognizant that the processing of a large number of FM translator applications could unduly burden the Commission's resources. Moreover, wholesale expansion of FM translator authority could pose significant and difficult new monitoring and enforcement obstacles.

36. For these reasons, we tentatively concluded in the *NOI* that translator operations should not be altered substantially. Nevertheless, we stated our willingness to consider the possibility that, in limited circumstances, expanded use of translator operations to include program origination might offer benefits to the public. We therefore requested comments on the value, need and desirability of expanding FM translator authority to permit increased program origination. Since the expected location of such translators would affect listeners' options as well as competing FM radio broadcast stations, we requested comments on the anticipated location of such new translators. We also requested information on the extent to which the service provided by FM radio broadcast stations might not meet the public's needs and how expanded translator program origination might further the public interest in this regard.

37. In evaluating the proposals for expanded program origination authority, we noted that any action we might ultimately take could be expected to affect our resources and administrative procedures for licensing and enforcement. Therefore, we specifically requested that parties weigh the implementation considerations and the administrative costs of their proposals, and their possible effects on other programs.

38. *Comments.* The issue of whether the Commission should allow FM translators the authority to originate programming generated much controversy among commenters. NAB and other broadcast interests object to any proposed changes in the translator rules that might result in the creation of a low power FM service, stressing that translators' proper role is to operate as a supplementary and fill-in service for FM radio broadcast stations and not as a low power origination service.⁴⁸ NAB notes that the Commission's Docket No. 80-90 has phased in introduction of over 700 new FM radio broadcast stations in individual communities and adopted revised allotments to accommodate hundreds of other new FM radio broadcast stations to provide service to many previously underserved or unserved areas. Moreover, NAB adds, the Commission is considering initiating a rule making proceeding to expand the AM radio services for listeners in local communities.⁴⁹ NAB asserts that creation of a low power FM service, and the introduction of hundreds of new low power FM operations, would be antithetical to the current efforts to revitalize AM radio. ABES contends that proposals for low power FM service are inefficient, would adversely impact the ability of FM radio broadcast stations to use FM translator facilities to broadcast within their service areas, and would impede implementation of the Table of FM Channel Assignments.

39. The Federal Trade Commission (FTC) suggests that employing translators for program origination has the potential to benefit consumers. The FTC states that an increase in the number of listening options -- in this case

translator program origination -- may increase consumer satisfaction by increasing the number of formats, the within-format variety, and the quality of the programming. To support this contention, the FTC submits a statistical analysis relating the daily average percentage of the population listening to radio to (among other things) the number of formats in various markets. The analysis concludes that an increase in the number of stations has a statistically significant effect on increasing the number of formats and that an increase in the number of formats has a statistically significant effect on increasing the percentage of the population listening to radio.⁵⁰

40. In response to FTC's study, the NAB submitted a study of radio listening behavior, which concludes that there is no need for translators with origination authority. It contends that the vast majority of the public has plenty of radio options. To illustrate this point, NAB's study delineates a range of counties, by population size, showing the average number of radio stations available in each type of county.⁵¹ NAB's study shows that in the smallest counties (those with populations of less than 1,000 people age 12 and older) an average of 10.5 different radio stations register listening audience as reported by diary keepers. In the largest counties (populations exceeding 500,000) the average is in excess of 80 stations. For the entire country, a radio listener has access to, on average, 26 radio stations. NAB also submits a list of recent translator applications purporting to show that the general focus of translator applicants is to provide service to already well-served areas with significant populations not in those areas for which the translator service was initially developed.

41. Other commenters supporting program origination authority for FM translator service contend that authorizing "narrowcasting" on translators would allow translator operators the ability to provide specialized program formats not available from FM radio broadcast stations.⁵² They state that, because translators can be operated at lower cost than FM radio broadcast stations, areas not presently served by existing FM radio broadcast stations would have access to locally originated programming that would increase the diversity of program services available to the public.⁵³ Some programming origination proponents seek authority to operate without geographical, market or profit restrictions.⁵⁴

42. Turro, another proponent of translator program origination, proposes that FM translators be licensed to provide local origination "narrowcasting" only if they are located in a region with no existing or allocable local commercial transmitting FM service and if the licensee can demonstrate that local service will not be preempted by a Docket No. 80-90 facility or existing FM stations under the current rules.⁵⁵ Turro also proposes that such translators should be subject to all Commission rules, regulations and policies applicable to FM radio broadcast stations so that no new or special regulatory standards need to be developed for this extension of translator service. Turro suggests that limited expansion of FM translator origination authority in these circumstances would enable areas without local service to have access to FM programming with little impact on FM radio broadcast stations licensed to distant communities.

43. NAB replies that few proponents of FM program origination authority propose to locate translators in truly unserved areas. Rather, it argues, these parties seek authority to initiate low power FM service in large to me-

dium sized markets where the potential to attract advertising revenues away from FM radio broadcast stations is high and the potential to jeopardize the financial viability of FM radio broadcast stations is strong. NAB also cautions that expansion of the FM translator service beyond its original function would unduly burden the Commission's limited administrative resources by resulting in a flood of applications from parties seeking program origination authority and requests for more power to accommodate a change in operational status from rebroadcasting to origination. Other commenting broadcasters agree with NAB that the appropriate method of ensuring local programming in areas where there may be a need for additional broadcast service is through establishment of additional FM radio broadcast stations.⁵⁶

44 *Proposal.* We propose to retain the existing prohibition against program origination authority for translators. We maintain that the proper role of FM translators in our FM allocations scheme is to provide secondary service to areas in which direct reception of signals is unsatisfactory due to distance or intervening terrain obstructions. We are committed to maximizing service to the public with efficient spectrum use and management. In view of our commitment to provide FM radio broadcast service in the most spectrally efficient manner possible, we believe it is desirable to hold constant the existing relationships in our FM allocations scheme and, thus, to maintain FM radio broadcast stations and translators in their current role as providers of primary and secondary service, respectively.

45 We are not convinced that FM translators should be given program origination authority. Where there is sufficient community interest, the rules which permit translators to rebroadcast the programming of FM radio broadcast stations provide an opportunity to import programming formats that are not otherwise available. We believe that, in these areas, to allow low cost translators to operate substantially like FM radio broadcast stations without subjecting the translators to the same requirements that are imposed on FM radio broadcast stations would undermine our goal of encouraging FM radio broadcast facilities to the extent possible. Furthermore, while imposing these requirements would vitiate our concern regarding unequal treatment, we note that such an action would effectively re-create low-power Class D noncommercial stations.⁵⁷ The Commission determined in 1978 that the operation of these limited-range (10 watt) stations could create substantial spectrum inefficiencies if they operated on a primary basis. The large number of limited-range Class D stations then operating were impeding licensing of more efficient Class B and C stations. Specifically, the Commission observed that FM radio broadcast stations make more efficient use of the spectrum than low power stations because the ratio of coverage to interference area is much larger for higher power FM radio broadcast stations. Therefore, to now propose to amend the rules in a manner that would encourage translator or low power operation would be counter-productive.⁵⁸

46. We wish to underscore that we do not intend to modify the existing requirement that an independent-party owned translator, providing fill-in service or service to other areas, must obtain the permission of the FM radio broadcast station to rebroadcast its programming.

Local service obligations

47 Under the current rules, FM translators have no local service obligations. We noted this fact in the *NOI*, although commenters were not specifically asked to consider whether local service obligations would be appropriate for FM translators.

48 *Comments.* Several broadcast commenters address this issue in their comments. Specifically, some of these parties object to granting translator operators program origination authority since translators are not subject to the same local service obligations that FM radio broadcast stations bear.⁵⁹ Alternatively, CBS contends that, if translators are granted program origination authority, they should be subject to the same public service obligations imposed on FM radio broadcast stations. NAB favors the adoption of minimum coverage requirements of the community of license and recommends that the 3.16 mV/m contour of the translator cover the entire limits of the community. NAB believes that its proposal would avoid cases in which translators licensed to particular communities provide high powered coverage to larger, more populated areas, rather than coverage to the licensed communities.

49 *Proposal.* We continue to believe that FM translators should be exempt from local service obligations in all areas. We believe that imposing local service obligations on translators would exact a cost on their operations that could jeopardize their existence, contrary to our goal of extending service to the public. We seek comment on our proposal to continue to exempt FM translators from all local public service obligations. Commenters should also balance the costs incurred in meeting any public service obligations against the secondary nature of translators.

Signal delivery

50 The current rule generally provides that translators may only rebroadcast the signal of an FM radio broadcast station or another translator that is received directly-over-the-air.⁶⁰ The only exception is that an NCE FM translator station operating on a reserved channel, and owned and operated by the licensee of the primary station, may use alternative signal delivery means, including, but not limited to, satellite and microwave facilities under certain conditions.⁶¹

51 In the *NOI*, we asked whether we should authorize commercial FM translators to rebroadcast distant signals delivered by any technical method, including microwave and satellite facilities. There we observed that the current rules limit commercial FM translator reception to the line-of-sight of their primary station and may have the unintended effect of restricting the use of translators even within the primary station's predicted service area because of terrain features. We noted that, if adequate public policy justification exists for restricting the distance over which a commercial translator may pick up a distant signal, we could consider the imposition of distance limitations on the translator location, but not restrict the technology used to bring the signal to the translator itself. We, therefore, requested comments on the current rule restricting signal delivery to commercial FM translators to over-the-air transmission, and requested comments on whether changing the rule was in the public interest.

52. *Comments.* Four commenters support the use of any signal delivery technology to the FM translator that the licensee deems suitable.⁶² Specifically, La Tour argues that the use of alternative distribution technologies would provide reasonably priced delivery of a dependable input signal to the translator. Six commenters oppose the use of alternative signal delivery technology by commercial FM translators.⁶³ They reason that the use of microwave or satellite feeds would allow translators to operate far from the primary station's community of license. These parties contend that the importation of distant signals would erode the economic base of existing FM radio broadcast stations. London Bridge, in particular, argues that areas with no local community service should receive translator services from nearby communities to which their citizens turn for services that are only available in a large city. It adds that the over-the-air delivery rule acts as a natural barrier to prevent the establishment of regional translator networks. NAB, however, would only expand the permissible distribution technologies to include microwave delivery. NPR supports the use of alternative signal delivery technology for NCE FM stations with a limitation imposed on the distance between the primary station and the NCE FM translator.

53. *Proposal.* We propose to change the signal delivery rule limiting commercial FM translators to over-the-air signal delivery to permit FM translators providing fill-in service to use terrestrial microwave transmission facilities. We believe that this change will facilitate the rebroadcast of broadcast signals to remote or geographically inaccessible areas where over-the-air terrestrial retransmission has not been particularly effective. We seek comment on this proposal.

Use of auxiliary frequencies

54. Under existing rules, only NCE FM translators owned and operated by their primary station may use auxiliary broadcast frequencies for program reception.⁶⁴

55. In the *NOI*, we sought comment on the possible authorization of certain broadcast auxiliary frequencies for the delivery of signals to commercial FM translators, if we were to permit the use of alternative signal distribution technologies.⁶⁵ We noted that these frequencies are congested in many areas, particularly the larger markets, and that use of intercity relays to deliver signals to translators could affect the availability of channels to serve FM radio broadcast stations. We also observed that broadcast auxiliary channels might be unused in the more remote areas served by FM translators. Thus, we suggested that such use might be acceptable if their use was secondary and frequency usage was coordinated with local frequency coordinating committees.

56. *Comments.* Most of the seven parties commenting on this issue would permit use of auxiliary broadcast frequencies on a secondary basis after clearance with local frequency coordinating committees.⁶⁶ However, a number of commenters would place additional restrictions on such use. NPR states that, in areas where the upper range of studio-to-transmitter links (STLs) and intercity relay links are not used to their full capacity, their use by translators might be possible under certain conditions.⁶⁷ It contends that use of these frequencies could result in greater spectrum efficiency and could provide a flexible and less costly means for delivering broadcast signals to translators. In order to ensure that auxiliary frequencies are only used by translators providing fill-in service or

service to unserved areas, Greater Media proposes that use of these auxiliary frequencies be restricted to FM radio broadcast station owned translators within specified geographic limits.⁶⁸ Lotus finds any secondary use of broadcast auxiliary channels, other than for the delivery of programming to translators which are licensed to an FM radio broadcast station, unacceptable because the amount of spectrum is extremely limited. CBS believes that translators' use of auxiliary frequencies should be limited to the 950 MHz STL band because other auxiliary frequency bands are too congested for translator use and interference would be likely. NAB objects to all use of auxiliary broadcast frequencies, even on a secondary basis, arguing that these frequencies are overly congested and should be used only by FM radio broadcast stations.

57. *Proposal.* We propose to authorize commercial FM translators in fill-in areas to use aural broadcast auxiliary frequencies (intercity relay stations) on a secondary basis.⁶⁹ We also propose to condition the use of these frequencies on advance coordination with local frequency coordinating committees, or local broadcast users in the absence of a coordinating committee. Specifically, we propose to modify our rules to: 1) expand the use of aural broadcast intercity relay stations to include their availability for the transmission of program materials between an FM radio broadcast station and its translators; 2) authorize the transmission of program material between FM radio broadcast stations and the FM translator facilities; and 3) amend the licensing procedures to accommodate such usage.

58. We believe that this proposed use of auxiliary frequencies, with the specified limitations, is consistent with our objective to authorize translators as a supplemental service to that of FM radio broadcast stations. Notwithstanding arguments raised by some parties that these frequencies are congested in many areas, it is at least likely that broadcast auxiliary channel space is available in more remote areas, where translators are needed most. Therefore, the authorization of auxiliary frequencies in these areas would be in the public interest because it would maximize the potential for service. However, the secondary nature of this proposed authorization would minimize the impact on the availability of broadcast auxiliary frequencies in those areas where congestion may already exist. We request commenters to consider this proposal for the use of broadcast auxiliary frequencies to transmit programming to FM translators.

Conditional relaying

59. The current rules permit FM translators to retransmit the signals of another FM translator. However, translators may not be used solely as a means for relaying the signal of the primary station to a more distant facility.⁷⁰ The rules also state that each FM translator is intended to provide direct reception to the public and any other use is incidental.

60. In the *NOI* we asked for information on the extent to which translators are being used solely to relay signals to another translator in a distant community served by one or more FM radio broadcast stations. Additionally, parties were asked to consider NAB's proposal that we adopt community standards and minimum signal strength requirements for community coverage to ensure that translators serve populated areas.

61. *Comments.* Broadcast interests argue that translators should be prohibited where they are used solely or primarily to deliver a signal to another translator in order to permit a primary station to expand its geographic coverage.⁷¹ Greater Pacific contends that the use of translators as relays threatens the economic viability of small to medium market FM radio broadcast stations. It therefore supports NAB's proposal to prevent the use of translators solely as relays by requiring that translators provide minimum signal coverage to a single community. KRXXV claims that some existing translators are located in "ghost towns," "unpopulated railroad sidings," and areas with "no current residents" in a manner that permits primary stations to expand their coverage to distant locations. It recommends that translator applicants be required to demonstrate that each proposed translator serves a *bona fide* community. Robert Jones recommends canceling licenses where translators are used as relays. He contends that since the present rules require translators to be licensed to a community or area, it would be easy to detect "relay" only filings. In contrast, St. Clair recommends licensing of FM translator relays on a third priority basis similar to the licensing of TV translator relays under Part 74, Subpart F.

62. *Proposal.* We find that the current rules on conditional relaying for translators should be retained. These rules proscribe establishment of a translator solely for the purpose of relaying the signals of the primary station to a more distant facility, but do not prohibit such uses on an incidental basis. We continue to believe that translators should not be used solely as relay devices. However, we are also concerned that strict population or community criteria would inhibit the establishment of translators bringing service to remote areas, to the detriment of those most in need of the service. Accordingly, we will not set forth a strict rule defining the size of populations meriting translator service. Moreover, we believe that our proposed financial support and ownership rules will allay some of the objections raised by the parties to translator relay networks established by FM radio broadcast stations seeking to expand their broadcasts into small or medium markets. Under our proposed rules, an FM radio broadcast station would not be able to own, operate or support FM translators in areas outside its protected contour. Translators serving those areas must be operated by independent parties without any financial contribution from the primary station. Therefore, we believe that our proposals to revise other rules will effectively prevent the establishment of translator relays when their principal purpose would be to extend the geographic coverage of primary stations into other areas already served by AM or FM radio broadcast stations. We seek comment on whether our proposal to retain the existing rules on conditional relaying in conjunction with our proposed ownership and financial support rules would be sufficient to deter the establishment of such translator relay stations.

Need requirements for translators

63. Section 74.1232(b) states that an applicant may be licensed to operate more than one FM translator, even if such translators serve substantially the same area, upon an appropriate showing of need for the additional stations.⁷² The rule does not contain specific guidelines regarding the showing necessary to justify grant of a translator application, or regarding the burden of proof necessary to demonstrate lack of need.

64. Under our current standard, the need for a translator is presumed upon the filing of the application. Only if a *prima facie* showing of lack of need is made, or if an applicant is seeking more than one FM translator to rebroadcast the same FM radio broadcast station, do we require the applicant to document a need for the proposed new FM translator stations. In the *NOI*, we noted that certain parties have urged us to shift the burden of proof to the applicant to demonstrate the need for the new service. They further recommend that we adopt guidelines for establishing a need for the new service. Thus, we sought comment on the appropriate burden of proof to be allocated among the applicants in translator proceedings. Commenters were requested to consider whether applicants should be required to establish a standard for need for the proposed translator service. Parties also were asked to comment on the criteria for an applicant's showing of need for such service and the criteria for an objector to show a *prima facie* lack of need.

65. *Comments.* Seven broadcasters commented on this issue. NAB suggests that, in order to limit translator service to unserved areas, the translator applicant should bear the burden to demonstrate the need for the facility. It notes that where the area is currently unserved, the burden would be low. NPR recommends that the burden of proof should vary with the circumstances. NPR asserts that the need for a translator should be presumed in the case of an applicant seeking authority to provide fill-in service. In that instance, the burden should shift to the opponent of the translator application to demonstrate lack of need. Where the applicant is an FM radio broadcast station or an independent party applying for authority to operate a translator outside the primary station's 1 mV/m contour, NPR believes that the burden of proof should fall on the applicant. CBS recommends that, to avoid determining whether an area is underserved or could support more stations, the burden of proof should be placed on the party proposing new translator service. However, CBS urges the rejection of any showings based on program format issues. Greater Media, KAB and KASI argue that need should be presumed when a translator applicant proposes to provide fill-in service or new service to wholly unserved areas.

66. *Proposal.* We propose to revise Section 74.1232(b) of the rules to clarify that "need" refers solely to the quality of the signal received (i.e., technical necessity) and that programming content, format, or transmission needs of an area will not be considered in our determinations. We propose to apply similar standards to translators providing fill-in service, as well as to translators providing service to other areas. We also propose to clarify that in order for a primary station to demonstrate the need to own a second translator within its protected contour, it must only show that a technical necessity exists for the additional translator. We believe that removing any issues of programming from translator applications will eliminate unnecessarily subjective deliberative criteria from the application process. Conditioning "need" solely on technical criteria will clarify the information required for translator applications, expedite the processing of those applications and facilitate the delivery of higher quality broadcast signals to the public. Commenters are asked to address these proposals.

Method for selecting among applicants

67. Our existing procedure for selecting among mutually exclusive competing applicants for translator authority relies upon voluntary mutual agreement among the applicants.

68. In the *NOI*, we indicated an intent to reexamine our method for deciding between mutually exclusive applications for FM translator stations. We stated that, in our opinion, the comparative hearing process now being used for TV, AM, and FM radio applications would not be cost effective for resolving conflicts between FM translator applicants. Therefore, we suggested that it might be more appropriate to use an alternative approach, such as a lottery authorized by Section 309(i) of the Communications Act of 1934, as amended.⁷³ We also discussed the feasibility of awarding preferences to primary station applicants seeking to provide fill-in service. Finally, we requested comment on possible approaches for resolving mutually exclusive FM translator applications.

69. *Comments.* Five commenters address the lottery proposal raised in the *NOI*.⁷⁴ TBA believes that lotteries are an effective method of selecting among mutually exclusive applications. It also supports the establishment of a priority for FM radio broadcast station applicants seeking to provide fill-in service, with a filing window enabling FM radio broadcast stations to submit applications. La Tour supports the use of lotteries, filing windows, the imposition of application limits during any one filing period, and grants on a first come, first served basis.

70. Four parties discuss mutually exclusive application procedures.⁷⁵ NAB and NPR favor retaining existing application procedures with the creation of a preference for FM radio broadcast stations applying for translator licenses to provide fill-in service and service to unserved areas. Seven Ranges Radio proposes that, in the case of mutually exclusive applications for the same class of station, the applicant proposing fill-in service would prevail. Additionally, it recommends that for applications involving different classes of stations, a preference be granted to an applicant proposing to relay the lower class station. In all other cases, Seven Ranges Radio suggests that the applicant whose translator is closest to the primary station should prevail. NTA supports the creation of a window period for filing applications, with a ceiling on the number of applications submitted, and a requirement that permittees construct all translator stations prior to filing any additional applications. It also contends that if a permittee fails to complete construction within the allotted period, the permittee should be required to surrender the permit to the Commission. NTA also would prohibit the lease or sale of a translator permit or license.

71. *Proposal.* In the *NOI*, we proposed to revise our procedure for selecting among mutually exclusive competing applicants for translator authority. We specifically proposed use of a lottery system as an efficient mechanism by which to select among numerous mutually exclusive applicants. However, we note that, as part of our comprehensive review of all translator regulations, we propose to eliminate the rules restricting FM translators to certain limited frequencies and to permit them to use all 80 channels (Channels 221-300) of the commercial FM frequency band.⁷⁶ We believe that if translators are permitted to operate anywhere in the commercial band, mutually exclusive applications will not arise with any frequency and thus, it is not necessary to use a lottery system to dispose of them. In the rare event that we are faced with mutually exclusive applications, we propose to

stipulate different frequencies as necessary for the applicants. Applications for FM translator stations proposing to provide fill-in service of the commonly owned primary station will be given priority over all other applications. In those instances where there are no available frequencies to substitute for a mutually exclusive application, we propose to apply the priority classification specified in BC Docket No. 80-130, as appropriate, in selecting a winning applicant for the FM translator station.⁷⁷ We seek comment on our proposal.

Definition of major change

72. The rules define a major change for FM translator stations as any change in output frequency (output channel), or authorized principal community, or area of service.⁷⁸

73. *Comments.* Although this issue was not raised in the *NOI*, TBA addresses this matter in its filing. It argues that the rules lack clarity with respect to what constitutes major and minor changes. This situation allows an applicant to propose a minor change which significantly increases its coverage area and which, in fact, should be classified as a major change under the rules. Therefore, TBA proposes that the rules more explicitly define major change. In this regard, it suggests that in addition to any change in frequency, a major modification should include: (1) any change in the community of license; (2) an increase by 50% of the population served; or (3) an expansion of the primary signal into the 1 mV/m contour of an existing FM radio broadcast station. TBA asserts that since translators have no community service obligations, defining minor modification with respect to authorized principal community or area of service lacks clarity. Finally, TBA contends that a translator should not be permitted to change its directionality if, by doing so, it would rebroadcast the primary station into a community which is not unserved or underserved.

74. *Proposal.* We propose to define "major change" as a proposed change of coverage area of more than ten percent of the previously authorized 1 mV/m contour,⁷⁹ or a change in frequency. A change in the authorized principal community will no longer be considered as a criteria. All other changes will be considered minor changes. We note that this proposal would apply to both fill-in and other classifications of translators under consideration.

75. We believe that the test we have outlined above is an effective method of defining "major" and "minor" changes for translator applications. While the proposal set forth by TBA has some merit, we believe it would impose a significant burden on applicants, requiring them to expend substantial financial resources on engineering and demographic studies that would not be necessary under our proposed definition of major change. We also believe that our proposal is an effective method of determining whether a translator applicant is proposing a major change. We request comment on our proposal, including whether the ten percent change in coverage area is too restrictive, and whether a reduction in coverage of more than ten percent should be considered a major change. Commenters may also want to consider whether standards are needed to clarify the manner in which the relevant coverage change should be measured.

Multiple ownership limits

76. Under existing rules, FM translators do not count against multiple ownership limits.⁸⁰

77. *Comments.* Although this subject was not raised in the NOI, two broadcast commenters address this issue. NAB suggests that the Commission adopt a "cap" — i.e., place limits on the number and location of FM translators any party can operate. It suggests that the ownership limits for FM radio broadcast stations would provide an appropriate guideline for choosing the cap, although the restrictions on translators need not be precisely the same. CBS argues that if translators were to be authorized to originate programming, they should be subject to multiple ownership rules.

78. *Proposal.* We believe it is appropriate to continue to exclude the ownership of FM translators for purposes of the multiple ownership rules in all cases. We see no reason to apply multiple ownership limits on the number and location of translators a single party can own and/or operate, as NAB suggests. Translators are established where there is a need to supplement the service provided by FM radio broadcast stations, and NAB's proposed restrictions could impede the delivery of necessary service to the public. Moreover, since translators are authorized on a secondary basis, subject to displacement by FM radio broadcast stations, it does not appear reasonable to impose multiple ownership restrictions on them. Commenters are asked to address this proposal.

79. We also see no reason to subject translators to the radio "contour overlap" rule which prohibits the common ownership of two or more commercial radio stations in the same broadcast service in the same geographic area, e.g., two AM or two FM stations whose 1 mV/m contours overlap.⁸¹ We propose to exempt FM translators from this rule and seek comment on this issue. We believe that where an FM radio broadcast station establishes a translator within its predicted service area, or permits another entity to do so, it is presumed that reception of its signal is precluded in the area to be served by terrain obstructions. Thus, while there may be common ownership between the primary station and one translator in the same service area, there actually would not be service from more than one commonly-owned station to the same population.⁸² Where a translator is located beyond the protected contour of its primary station, and within the service areas of other FM stations, common ownership between the primary and translator stations could not occur by definition.

Cross - service translating

80. The current rules preclude an FM translator from rebroadcasting the signal of any station other than that of an FM radio broadcast station or FM translator.⁸²

81. In the NOI, we sought comment on NAB's proposal to permit FM translators to be used to rebroadcast the signals of AM stations. We noted that distinct technical differences between the AM and FM services militated against merely extending the current FM translator authorization to include the rebroadcast of AM signals. We observed that there may be cases where it would be desirable to permit AM stations to use FM translators to provide fill-in service. We also indicated that the use of FM translators by AM stations theoretically could resolve problems of nighttime reductions in service area experienced by many AM stations. However, we noted that

there could be adverse effects on AM service if we were to authorize FM translators to deliver AM programming, including diversion of audience from the AM band.

82. Eleven commenters support NAB's proposal to allow FM translators to retransmit AM signals.⁸³ They find that cross-band transmission authority would improve the quality of AM signals and would particularly benefit those daytime AM stations whose nighttime coverage is significantly reduced and subject to interference. Three parties oppose the proposal. Greater Media rejects the proposed cross-band use of FM translators to rebroadcast AM signals and recommends use of synchronous AM transmitters for AM signal enhancement. Lotus and NewCity object to this proposal on the grounds that it is inconsistent with the Commission's overall objectives to improve AM service.

83. *Proposal.* We propose to retain the current rule precluding an FM translator from rebroadcasting AM signals. We have serious reservations that actual improvements in AM service could be gained by allowing FM translators to rebroadcast AM stations in fill-in and other areas. The ground wave propagation characteristics of AM signals are such that they normally do not leave service voids or "shadowing" — i.e., holes in coverage — similar to the "shadowing" found in the FM band, although licensees may desire to supplement coverage in directional antenna nulls. Thus, there is generally no reason for AM licensees to establish fill-in service facilities on the FM band. Moreover, the Commission is conducting a comprehensive proceeding to improve the AM radio service and to enhance the ability of such stations to compete in the marketplace.⁸⁴ Thus, we believe that to approve the general use of FM translators by AM stations would contravene the goals of that action.

TECHNICAL ISSUES

Frequencies available to FM translators

84. The existing rules authorize commercial FM translators to use the 20 channels of the FM broadcast band formerly authorized for Class A stations. NCE FM translators may use these 20 channels plus the 20 channels reserved for noncommercial use (Channels 200-220).⁸⁵ In the NOI, we invited commenters to address the possible elimination of these restrictions to permit FM translators to use all 80 channels (Channels 221-300) of the commercial FM frequency band.

85. *Comments.* Eight commenters oppose amending the rules to allow commercial FM translators to operate on all 80 channels of the commercial band (Channels 221-300).⁸⁶ Greater Media states that the existing restriction is necessary to avoid possible interference to Class B and C stations. NBC agrees that restriction is necessary to avoid co-channel and adjacent channel interference. Twelve commenters support a rule change.⁸⁷ NewCity argues that use of all 80 channels should be restricted to translators licensed to FM radio broadcast stations in order to promote spectrum efficiency and interference protection. Temple supports the use of all 80 commercial channels, contending that there is a shortage of reserved band FM channels within Channel 6 television coverage areas.

86. *Proposal.* In the 1970 Report and Order in Docket No. 17159, *supra*, we limited commercial FM translators to the use of the 20 Class A channels. However, we left

open the option of revisiting this determination in a subsequent rule making proceeding should experience indicate that additional frequencies were needed.⁸⁸ Our experience now leads us to conclude that the demand for Class A channels exceeds the supply. We have already modified our rules to permit Class A FM broadcast stations to operate on all 80 channels of the commercial frequency band.⁸⁹ In addition, translator applicants currently must conduct expensive and generally inconclusive studies to demonstrate the unavailability of Class A channels.⁹⁰ Given the inconclusiveness of such studies and their costliness, we find this manner of proceeding highly inefficient. Consequently, we propose to allow FM translators to operate on all 80 non-reserved commercial channels. We do not concur with those commenters who contend that this action would create an interference problem since the secondary status of translators requires them to operate on a non-interference basis. We seek comment on this proposed expansion of the frequencies available for translator use. We also seek comment on ways to alleviate the expected impact that expanded channel availability will have on the time needed to dispose of applications tendered for filing and whether FM radio broadcast stations should be allowed to use first adjacent channels for fill-in translator service.

Maximum power output

87. Currently, power limits for FM translator operation are based on a transmitter power output (TPO) standard. FM translator stations located east of the Mississippi River or in Zone I-A (*i.e.*, California, south of the 40th parallel) are limited to a TPO of 1 watt. The maximum permissible TPO for FM translators located in all other areas (*i.e.*, west of the Mississippi and outside Zone I-A) is 10 watts.⁹¹

88. In the *NOI*, we requested commenters to address whether it might be desirable for the authorized power of FM translators to be uniform throughout the country. Parties were asked to consider the effect of increasing the authorized power for FM translators to 10 watts nationwide, and particularly whether translators operating at higher powers might cause increased interference to FM radio broadcast stations located east of the Mississippi River and in Zone I-A. We also requested comment on NAB's proposal to rely on the effective radiated power (ERP) of translators and/or antenna height above average terrain (HAAT) standards, rather than TPO, as a more effective means to prevent interference.

89. *Comments.* Broadcast interests generally support adoption of ERP and HAAT standards, but propose various limitations. NAB maintains that the current TPO limitations have proven inadequate to protect FM radio broadcast stations from translator interference. Therefore, it recommends that the Commission adopt maximum permissible ERP standards and HAAT limitations to make coverage and interference standards more effective. In this regard, NAB proposes a maximum permissible ERP of 10 watts for areas east of the Mississippi River and Zone I-A and 75 watts for other areas. NAB also proposes a HAAT limitation of 30 meters (100 feet).⁹² Greater Media recommends a 10 watt/100 watt permissible ERP limitation (for areas east and west of the Mississippi) and an HAAT of 100 meters. In response to Greater Media's proposal, NAB contends that its 10 watt/75 watt limitations would foster a more reasonable balance between the FM translator goals of adequate local coverage and interference avoidance. At the same time its 75 watt limit would

minimize the costs for establishing translator service since less sophisticated antenna arrays are needed to achieve a 75 watt ERP rather than a 100 watt ERP.

90. TBA suggests that the Commission adopt a maximum ERP of 100 watts with an HAAT limit of 150 meters. NAB counters that an ERP limit of 100 watts (for areas that permit 10 watt TPOs) exceeds the power required to provide localized service and creates the risk of more interference than its 75-watts proposal. Scripps Howard recommends that a translator's ERP be limited to 50 watts if the HAAT exceeded 30 meters.⁹³ Seven Ranges Radio favors a maximum power standard that includes a nationwide power level of 10 watts TPO, but limits translators to 100 watts ERP at 30 meters HAAT. Alternatively, Lotus Broadcasting suggests that the 1 watt/10 watt geographic power standard be retained, but that ERP and HAAT also should be limited to 20 watts and 30 meters, respectively, with a requirement that power be reduced proportionately above that height.

91. Temple, which operates two FM translators with the existing restriction of 1 watt TPO, favors increasing TPOs to 10 watts per antenna nationwide. Temple asserts that an increase from 1 to 10 watts would conserve space at crowded transmitter sites, and that the adoption of prohibited overlap standards would protect FM radio broadcast service and other secondary services from potential harmful interference that could result from increasing the TPO to 10 watts. A number of nonbroadcast interests also support a nationwide 10 watt power limit.⁹⁴ In particular, St. Clair argues that a uniform 10 watt power level would be beneficial in the east for those areas that require increased power because of dense foliage, mountains and urban areas with high noise levels.

92. Turro proposes that FM translators should be allowed to use power levels up to 25 watts, provided that they do not interfere with any FM radio broadcast service facility. In reply, NAB argues that an increase of the permissible TPO *only*, whether or not measured at the antenna input port, would result in higher ERPs and would exacerbate actual and potential interference to FM radio broadcast stations. NAB recommends the adoption of more stringent technical standards as the only sound method of eliminating existing and potential interference.

93. Family Stations, on the other hand, urges the Commission not to adopt ERP and HAAT limitations, arguing that the existing rules provide adequate interference protection for FM translators and that the Commission only needs to clarify TPO limits. NAB disagrees that the existing rules give adequate protection to FM radio broadcast stations from translator interference. It urges that ERP and HAAT limitations be required to correct these inadequacies. La Tour disputes the need to restrict coverage through ERP and HAAT limitations. He asserts that he employs directional antennas to maximize the ERP of his translators and that any restrictions on the translator's radiated signal strength would be unreasonable.

94. *Proposal.* We propose to change our standards regarding translator maximum output power from TPO values to ERP values primarily because a known TPO does not yield a unique predicted contour. This is due to the impact of variables such as the type and length of transmission line and the gain of the antenna used, both of which affect the actual power radiated. Consequently, we have found that the actual power radiated can bear little relation to the TPO fed into the transmission system. As a result, FM translators can achieve vastly larger service

areas than were contemplated when the TPO standard was adopted.⁹⁵ On the other hand, for a given height a known ERP yields a unique contour which can be used to predict coverage and interference and thus provides superior evaluative criteria.

95. Accordingly, we propose to replace current TPO standards with limits on the maximum permissible ERP. We propose to adopt a 1 kW ERP limit subject to restrictions on the radius of the translator's coverage contour specified below. We recognize that the 1 kW value is greater than the ERP limits proposed in the comments but stress that it is an outside limit rather than a recommended usage level. Within the 1 kW limit, translator licensees will have flexibility to design specific ERP and HAAT combinations tailored to provide better coverage of the area they seek to serve. The restrictions imposed by the coverage contour radius, however, will ensure that translators retain their supplemental role.

96. We do not believe that any additional restrictions are needed for fill-in translators because our other proposals require the 1 mV/m contour of the translator to stay within the protected contour of the FM radio broadcast station being rebroadcast.⁹⁶ Within these parameters, a translator operator would have flexibility to determine the appropriate ERP and HAAT that would best serve its needs.⁹⁷

97. We also propose to adopt a maximum power criterion of 1 kW ERP for translators serving other areas. However, we propose to subject such translators to the additional restriction that the distance from their transmitting antenna to their predicted 1 mV/m contour may not exceed 16 km (approximately 10 miles)⁹⁸ in any direction. We will require applicants to compute the antenna height above average terrain along each of 12 distinct radials, with each radial spaced 30 degrees apart. The bearing of the first radial shall be true north. Along each radial the ERP shall be such that the distance to the predicted 1 mV/m coverage contour does not exceed 16 kilometers. We believe that the use of 12 evenly spaced radials is sufficient to allow an applicant to demonstrate compliance with the power/distance limitations we are imposing. Therefore, we will not accept petitions or comments challenging an applicant's showing unless such challenge intends to demonstrate prohibited contour overlap or actual interference. By proposing a maximum coverage area for the transmitter signal, we believe that the ERP and HAAT of the antenna can be varied to achieve the intended service area of the translator in a predictable manner, thereby eliminating a number of problems inherent in the use of TPO. We further believe that our proposed ERP and distance limitations would allow translator applicants greater flexibility in designing systems that would result in a higher quality of service. For example, a translator operating with an ERP of 1 kW could utilize an antenna with an HAAT of 77 meters; a translator operating with 600 watts ERP could employ an antenna with an HAAT of 98 meters; a translator operating with 500 watts ERP could use an antenna with an HAAT of 107 meters, a translator operating with an ERP of 50 watts could utilize an antenna with an HAAT of 340 meters, and a translator operating with 10 watts ERP could utilize an antenna with an HAAT of 860 meters. We ask commenters to address our proposal to impose maximum power output standards, including the limits we suggest.

98. Since higher powered stations are more likely to contribute to significant human exposure to radiofrequency (RF) radiation,⁹⁹ the proposal to change to an ERP standard requires consideration of the potential environmental impact from RF radiation emitted by such stations. Accordingly, we propose to amend Section 1.1307(b) of the Commission's rules to require FM translator stations operating with more than 10 watts ERP to consider the potential impact of RF radiation on the environment.

Antennas

99. The existing rules for licensing of multiple and composite antennas and the various forms of polarization are imprecise.¹⁰⁰ With respect to multiple antennas, Section 74.1235(a)(2) specifies that they are permissible as long as their radiation fields do not combine. The current rules do not contain precise standards for circularly polarized and composite antennas.

100. We did not specifically solicit comment on the possibility of clarifying or revising our rules for multiple, circularly polarized and composite antennas in the *NOI*. However, we noted that because the existing rules only limit transmitter power output, licensees have considerable discretion regarding the use of antennas and other equipment.

101. *Comments.* With respect to this matter, Greater Media proposes retention of Section 74.1235(a)(2), which prohibits the combining of radiated fields from multiple antenna arrays. Greater Media asserts that a limit on power versus height is necessary to prevent potential abuses. It also states that applicants proposing greater antenna heights should be subject to ERP reductions proportionate to the antenna HAAT, similar to the methodology employed in the commercial FM service. Further, regarding antenna systems, Temple suggests that the Commission authorize circular polarization, which it contends is superior to single or "dual" polarization.

102. *Proposal.* We believe that our proposal to use an ERP standard to set maximum power limits should cure any ambiguity in our rules concerning the licensing of multiple antennas. The total radiated power in any direction from all antennas could not exceed the 1 kW/16 km limit, based on computations of antenna height above average terrain along each of 12 distinct radials, with each radial spaced 30 degrees apart. Similarly, with respect to composite antennas, the proposed ERP standard should simplify matters by giving translator operators discretion to use composite antennas as long as the radiated field in any direction falls within the requisite power/distance limit. With respect to dual or circularly polarized antennas, we propose that the ERP/distance limit apply equally to both the horizontally and vertically polarized components. We ask commenters to address these issues.

Standards for directional antennas

103. The current rules do not specifically address the use of directional antennas by FM translators, and therefore do not include standards.¹⁰¹ In the *NOI*, we requested comment regarding the possible imposition of such standards.

104. *Comments.* Broadcast commenters support the use of directional antennas as a means of reducing interference by FM translators to FM radio broadcast stations. VAB and NCAB claim that adoption of ERP levels and more precise control of the use of directional antennas, including a contour overlap standard or distance standard similar to those developed for FM radio broadcast stations, are necessary to protect against interference. Temple advocates use of directional antennas to promote efficient use of the FM spectrum and notes that such antennas allow FM translators to be situated where non-directional antennas would cause interference to FM radio broadcast stations. TBA states that the absence of technical standards for antenna height and power, as well as directionality, allows excessive power usage by FM translators. TBA

recommends that the Commission require directional antennas to provide contour protection to avoid interference.

105. *Proposal.* We propose to codify the use of directional antennas by FM translator stations and to impose standards for such use. As we found in our decision in MM Docket No. 87-121,¹⁰² the technical characteristics of directional FM antennas permit licensees to short-space their transmitters, while at the same time providing full interference protection to the service of other co-channel and adjacent channel licensees. We believe that directional antennas also provide applicants with additional flexibility in antenna site selection for the translator service. The contour protection they give is a valuable alternative to the proposed distance separation requirements because directional antennas provide predictable levels of signal attenuation in specific directions. We further propose that applicants seeking to use directional antennas for translator service include information as specified in Section 73.316 of the rules as part of their applications demonstrating conformance with the rules. We will also require the applicant to address the impact of its proposal on nearby existing or proposed AM, FM and TV broadcast antennas. We ask commenters to address these proposals and to consider whether some other standard should be adopted.

Interference criteria

106. FM translators are a "secondary" service and, as such, are authorized subject to the condition that they cause no interference to the direct reception by the public of the off-the-air signal of any authorized FM radio broadcast station.¹⁰³ The rules distinguish between predicted and actual interference. Predicted interference is the predicate for determining whether an application should be granted and is currently based on the contour overlap tables of Section 73.509 of the Commission's rules. Actual interference is the result of on-the-air experience and is the basis for determining whether an authorized FM translator station can remain in operation. Translator operators are responsible for correcting any interference caused by their signals. Otherwise they must suspend operation until such interference can be eliminated.

107. In the *NOI*, we recognized the concern among many FM broadcasters that the current rule may be inadequate to prohibit FM translators from causing interference to FM radio broadcast stations.¹⁰⁴ While standards that would absolutely preclude any measurable received interference by translators to FM radio broadcast stations would be impractical, we recognized that standards more stringent than those currently in place might provide additional protection without unduly restricting translator operations. We thus requested comment on several alternative approaches for improved interference protection. First, we inquired whether the adoption of distance separation standards for FM translators and co-channel and/or adjacent channel translators and FM radio broadcast stations would provide adequate protection.¹⁰⁵ These standards would be comparable to those specified for minimum distances between FM radio broadcast stations. A second means of interference protection would be to prohibit overlap of signal strength contours, as we have done for noncommercial educational FM stations.¹⁰⁶

108. We further acknowledged, in the *NOI*, that whatever technical interference standards we may adopt, there may be cases where translator-to-translator interference

occurs. We asked whether we should establish a policy to govern interference between translators, even though the translators are otherwise in conformance with the rules. In this regard, we asked commenters to address whether it was appropriate to adopt a policy that acknowledges that a certain degree of actual interference might be unavoidable even if translators meet our technical allocation standards. We emphasized that such provisions would apply *only* to interference from a translator to a translator or from a translator to another secondary service, and not to interference by translators to FM radio broadcast stations or vice versa.

109. *Comments.* Nine commenters favor use of the prohibited overlap interference protection standards used for NCE FM stations set forth in Section 73.509 of the rules.¹⁰⁷ TBA, Temple and H&E comment that determining FM translator allocations on the basis of prohibited contour overlap is superior to basing interference protection on distance separation because it permits the use of directional antennas to achieve protection. NAB, in contrast, supports retention of existing Section 74.1203(b) and the use of minimum distance separations based on an FM radio broadcast station's protected contour to determine the area to be protected from the interfering contour of the translator. NPR and Temple suggest that the Commission adopt interference calculations based on those used by the television translator service.¹⁰⁸ NAB opposes Temple's suggestion, arguing that there is no justification for FM translators to have the same degree of interference-free coverage as FM radio broadcast stations. NAB concludes that should such coverage need be established the better course would be to license an FM radio broadcast service facility.

110 Regarding standards for translator-to-translator interference protection, Greater Media supports the Commission's proposal to require translator licensees to accept mutual interference which may arise when such translators are otherwise in compliance with any new interference standards adopted. It asserts that licensees should be required to cooperate in the resolution of interference, and only rely upon Commission intervention as a last resort. Temple contends that translators, because of their secondary status, should be allowed to receive interference protection from existing translators at the option of the translator applicant. It further states that once the FM translator station is operative, it should be permitted interference protection from any new secondary service. La Tour argues that existing translators should have rights of protection against other new translators.

111. *Proposal.* For FM translators, we propose to adopt Section 73.509 as the means to define predicted interference, with the exception that commercial Class B and B1 stations will be protected to their predicted 0.5 mV/m and 0.7 mV/m contours, respectively, as specified in Section 73.215 of the rules. Further, for cases of actual interference, we propose to distinguish between interference to the transmission of a signal and its reception by the listening public. For transmission purposes we will continue to impose an absolute prohibition on translator caused interference. For reception interference, we propose to adopt the "significant number of complaints" standard we have found effective in resolving cases of interference for FM boosters.¹⁰⁹ While preparing and processing applications involving contour protection are more complex than preparing and processing applications conforming to the distance separation requirements, we

believe that the prohibited overlap standards are more appropriate for predicting interference from FM translators.¹¹⁰ We observe that contour protection takes into account the variability of the terrain surrounding stations, whereas the separation requirements are based on average terrain and assume terrain uniformity in all compass directions. Since translators are likely to be located in areas where terrain irregularities affect the availability of radio signals, we believe this factor should be considered when predicting translator interference. However, we will allow an FM translator applicant to demonstrate that, despite predicted contour overlap, interference will still not occur due to such factors as absence of population in the overlap area or mountainous terrain. By the same token, we will not grant an authorization for a new translator station, where the translator signal is likely to interfere with the reception of a regularly received off-the-air existing service in an area beyond the predicted overlap.

112. We acknowledge that evaluating interference by considering only the effect of the translator facility may tend to understate actual interference levels because of the cumulative effect of FM radio broadcast and translator station signals. Radio signal propagation is a probabilistic phenomenon, however, and the precise amount of the cumulative effect will vary with the individual circumstances involved. In the vast majority of instances the cumulative interference effect will be negligible. While a precise accounting of the cumulative effect could be performed on each individual application, such analysis is complex and time-consuming. Since the cumulative effect will not increase interference substantially, we believe the best course is to not take it into account for purposes of application preparation and processing. We also believe that the existing translator interference protection standards are sufficient for resolving any interference problems that arise. Because translators are secondary to FM radio broadcast service operations, in those rare instances where harmful interference occurs, it will be the translator operator's responsibility to resolve the problem. Harmful interference would be deemed to have occurred where the Commission receives a significant number of complaints.

113 In general, we have not found that interference between translators is a problem, although comments were requested on this matter in the *NOI*. Nevertheless, we feel that existing translators should be entitled to protection against predicted and actual interference generated by other FM translator stations. FM translator stations are granted on a first come, first served basis. Once established, they provide a significant secondary service to many remote areas throughout the United States. Listeners should not be deprived of clear reception because of the introduction of a competing secondary service FM translator station. We will therefore not grant authority for a new translator to operate if it will predictably cause interference to an existing translator station signal. We will also prohibit a translator station from causing actual interference to the signal of any other pre-existing authorized FM translator station. However, we are unpersuaded that a translator station is entitled to protection against an FM radio broadcast station. Translator stations remain a secondary service and must continue to accept interference from any FM radio broadcast station regardless of the area the translator station is serving. We request comment on this proposal.

TV Channel Six Interference

114. The existing rules provide no specific guidelines for evaluation of interference caused by NCE FM stations operating on the reserved band to television channel six.

115. In the *NOI*, we noted our concern that some NCE FM translators operating on reserved channels serving areas beyond the Grade B contour of a television station operating on channel six may be causing interference to the reception of that station. We mentioned that in the past we have found the non-interference requirements of Section 74.1203(a) sufficient to protect against interference in such cases. However, we asked commenters to advise us whether the adoption of further restrictions was warranted.

116. *Comments.* Six commenters address this issue. Three commenters believe that the current rules provide adequate interference protection and should not be revised.¹¹¹ Greater Media favors adopting interference restrictions parallel to those for FM radio broadcast stations.¹¹² Temple states that allowing NCE FM stations to operate in the commercial band (82-108 MHz) would alleviate channel six interference problems. MST argues that FM transmissions on channels 201-220 can cause interference to Channel 6 reception even when FM translators operate outside the television station's Grade B contour. MST proposes a revised rule which parallels the rule for NCE FM radio broadcast applicants, but eliminates provisions for antenna directivity, polarization and extreme terrain.¹¹³

117. *Proposal.* We propose to use two methods for dealing with potential interference to television channel six that would apply to translators providing fill-in service, as well as those providing service to other areas. For cases of predicted interference, we propose to adopt the use of the distance separation tables of Section 73.525 currently used to predict interference between television channel six and NCE FM radio broadcast stations. However with respect to NCE FM translators, we propose to apply this rule without consideration of population or need, for cases of predicted interference. For cases of actual interference, we will require the translator to cease operation if there are a "significant number of complaints" which cannot be resolved by modification of the translator station's operations.¹¹⁴ We ask commenters to address these proposals.

118. We also ask commenters to consider the feasibility of adopting a less stringent standard. We recognize that reliance upon the distance separation tables of Section 73.525 could unnecessarily preclude consideration of applications for NCE FM translator stations that might not cause actual interference to the signals of Channel six television stations. The signals radiated by the vast majority of television stations are horizontally polarized,¹¹⁵ while the signals of NCE FM translators may be vertically polarized only. This phenomenon greatly reduces the potential for interference. The potential for interference would be further reduced by adoption of the proposed ERP standard since this will make it easier to predict accurately the areas actually covered by FM translators. FM translators are also relatively low powered and are not required to place any particular energy contour over the community or area proposed to be served. Thus applicants could use intervening terrain features to shield the Channel six service area. Finally, the separation tables are based on maximum allowable power of the NCE FM radio broadcast stations, while FM translators are gen-

erally limited to a much lower ERP. For these reasons we believe that the distance separation tables of Section 73.525 of the rules may not accurately predict interference between television Channel six and the lower powered NCE FM translator stations. If this plan is favorably received we would propose to accept an application for an NCE FM translator unless circumstances suggest possible interference to Channel six signals, such as where the television signal is elliptical or circularly polarized and the translator would be located in a populated area within the television station's predicted Grade B contour. Where interference is theoretically conceivable we would require the translator applicant to demonstrate conclusively that the proposal would not cause interference to the reception of the Channel six television signal. During any test periods the translator would be required to cease operation if any interference is caused. For cases of actual interference we would require the translator to cease broadcast operation upon proof of such interference or receipt of a "significant number of complaints." We ask commenters to address these proposals.

OTHER MATTERS*Grandfathering criteria for existing translators*

119. The *NOI* did not address the matter of "grandfathering" existing translators that might be in conflict with the rules adopted as a result of this proceeding. However, a few parties comment on this issue. NAB and TBA oppose the "grandfathering" of translators in unserved areas and request that they be required to cease operations when FM radio broadcast stations commence operations in previously unserved areas. KASI, WTSL and KNOT object to the "grandfathering" of existing translators beyond the protected contour of the primary station unless they provide service to an unserved or underserved area. TBA asserts that all translators should be required to comply with revised rules.

120. *Proposal.* We wish to consider a number of alternatives with respect to the possible grandfathering of existing translators. These alternatives include requiring compliance: (1) with all new rules ultimately adopted as a result of this proceeding, granting waivers where needed; (2) with only the new technical rules; (3) within 5 years, at which time the old rules would sunset; (4) at the next renewal cycle, or (5) with the new technical rules when applying for modifications to the existing authorization. We request comment on each of these proposals.

121. We note that requiring translators to come into compliance with new technical rules could have the effect of withdrawing service from areas currently served, a result contrary to the public interest. At the same time we wish to ensure that existing translators do not cause interference to FM radio broadcast stations. We believe, however, that most translators are already in conformance with the technical rules we are proposing. Some of the proposed service requirements would be more stringent than those imposed by the current rules. For example, under the proposed rules primary stations would not be permitted to provide financial support for translators located in other areas. Commenters are asked to consider whether such financial arrangements should be grandfathered, or whether such existing independent party translators should be required to operate without primary station support after some transition period.

122. We further propose that pending, non-mutually exclusive applications should be processed under any new rules that are adopted as a result of this *Notice*. We note that a freeze on applications was imposed by the *NOI* in this proceeding.¹¹⁶ We propose to continue the applications freeze for 60 days after the effective date of any new rules adopted and, thereafter, to provide a 60 day period for applicants to amend their applications to conform with the new rules.¹¹⁷ We note that if the modification would result in a "major change," applicants would be required to file new fees in order for the Commission to process those applications. We also seek comment on these proposals.

Revised Rule Section

123. In light of the numerous modifications to the existing translator rules proposed here, we believe that it is also appropriate to undertake a general revision of Part 74, Subpart L, of our rules governing the FM translator and booster services. We propose to reorganize these rules to make them easier to implement and to clarify the language of the rules as needed in order to avoid misinterpretation. We note that the only substantive changes to the proposed rules set forth in Appendix B are those discussed above. Any other modifications in the proposed rules reflect our desire to clarify this subpart. Commenters are asked to consider whether the proposed revision of this rule section would serve the public interest. We also seek suggestions to make these rules easier to understand.

ADMINISTRATIVE MATTERS

124. Authority for this proposed rule making is contained in Sections 1, 3, 4(i) and (j), 303, 308, 309 and 403 of the Communications Act of 1934, as amended. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before June 15, 1990, and reply comments on or before July 16, 1990. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. In reaching its decision, the Commission may take into consideration information and ideas not contained in the comments provided that such information or a writing indicating the nature and source of such information is placed in the public file, and provided that the fact of the Commission's reliance on such information is noted in the *Report and Order*.

125. For purposes of this nonrestricted notice and comment rule making proceeding, members of the public are advised that *ex parte* contacts are permitted except during the Sunshine Agenda period. See generally Section 1.1206(a). The Sunshine Agenda period is the period of time which commences with the release of a public notice that a matter has been placed on the Sunshine Agenda, and terminates when the Commission (1) releases the text of a decision or order in the matter; (2) issues a public notice stating that matter has been deleted from the Sunshine Agenda; or (3) issues a public notice stating that the matter has been returned to the staff for further consideration, whichever occurs first. Section 1.1202(f). During the Sunshine Agenda period, no presentations, *ex parte* or otherwise, are permitted unless specifically requested by

the Commission or staff for the clarification or adduction of evidence or the resolution of issues in the proceeding. Section 1.1203.

126. In general, an *ex parte* presentation is any presentation directed to the merits or outcome of the proceeding made to decision-making personnel which (1) if written, is not served on the parties to the proceeding, or (2), if oral, is made without advance notice to the parties to the proceeding and without opportunity for them to be present. Section 1.1202(b). Any person who submits a written *ex parte* presentation must provide, on the same day it is submitted, a copy of the same to the Commission's Secretary for inclusion in the public record. Any person who makes an oral *ex parte* presentation that presents data or arguments not already reflected in that person's previously-filed written comments, must provide, on the day of the oral presentation, a memorandum to the Secretary (with a copy to the commissioner or staff member involved) which summarizes the data and arguments. Each *ex parte* presentation described above must state on its face that the Secretary has been served, and must also state by docket number the proceeding to which it relates. Section 1.206.

127. As required by Section 603 of the Regulatory Flexibility Act, the FCC has prepared an initial regulatory flexibility analysis (IRFA) of the expected impact of these proposed policies and rules on small entities. The IRFA is set forth in the Appendix C. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the *Notice*, but they must have a separate and distinct heading designating them as responses to the regulatory flexibility analysis. The Secretary shall cause a copy of this *Notice*, including the initial regulatory flexibility analysis, to be sent to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. Section 601 *et seq.* (1981).

128. The proposals contained herein have been analyzed with respect to the Paperwork Reduction Act of 1980 and found to impose a new or modified requirement or burden upon the public. Implementation of any new or modified requirement will be subject to approval by the Office of Management and Budget as prescribed by the Act.

129. To file formally in this proceeding, participants must file an original and five copies of all comments, reply comments, and supporting documents. If participants want each Commissioner to receive a personal copy of their comments, an original plus eleven copies must be filed. Comments and reply comments should be sent to the Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554.

130. For further information on this proceeding, contact Tatsu Kondo, Policy and Rules Division, Mass Media Bureau, (202) 632-6302.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

APPENDIX A

INITIAL COMMENTS

1. AGK Communications, Inc.
2. Association for Broadcast Engineering Standards, Inc.
3. Association of Maximum Service Telecasters, Inc.
4. Athens Broadcasting Company, Inc.
5. CBS Inc.
6. Central Missouri Broadcasting, Inc.
7. CGS Communications of Kingman, Inc
8. John Davidson Craver
9. Bruce F. Elving
10. Family Stations, Inc
11. Federal Trade Commission
12. Fuller-Jeffrey Broadcasting Companies, Inc.
13. Greater Media, Inc.
14. Greater Pacific Radio Exchange, Inc
15. Hammett & Edison, Inc.
16. Robert Jacoby
17. Robert A. Jones
18. Kansas Association of Broadcasters
19. KASI and KCCQ
20. KMEN/KGGI(FM)
21. KNEN
22. KNKK
23. KNOT
24. KRMH
25. KRRV
26. KRXV, Inc.
27. KYSM
28. John S. La Tour
29. Lew Latto Group of Northland Radio Stations
30. London Bridge Broadcasting, Inc
31. Lotus Communications Corp.
32. Timothy D. Martz
33. MHS Holdings, Ltd.
34. National Association of Broadcasters
35. National Public Radio
36. National Translator Association
37. NewCity Communications, Inc.
38. New Hampshire Association of Broadcasters
39. Lee S. Parr
40. Pleasant Broadcasters, Incorporated
41. Bruce Quinn
42. Radio One, Inc.
43. Scripps Howard Broadcasting Company
44. Seven Ranges Radio Co., Inc.
45. Slatton-Quick Company, Inc.

46. Byron W. St. Clair
47. St. Marie Communications, Inc.
48. Jon R. Swett
49. Temple University
50. Tucson Broadcasters Association
51. Gerard A. Turro
52. Virginia Association of Broadcasters and North Carolina Association of Broadcasters
53. WDAC Radio Company (Filed w/ Religious Broadcasters)
54. Jerry E. White
55. WIN Communications, Inc.
56. WTSL and WTSL-FM

REPLY COMMENTS

1. Alabama Broadcasters Association
2. Coalition for Scenic Beauty
3. Columbia Bible College Broadcasting Company
4. C R Crisler
5. KRXV, Inc
6. KTKT and KLPX(FM)
7. John S. La Tour
8. Lotus Communications Corp.
9. MHS Holdings, Ltd
10. Mount Wilson FM Broadcasters
11. National Association of Broadcasters
12. National Public Radio
13. The Rutherford Group, Inc.
14. Tribune Broadcasting Company
15. Tucson Broadcasters Association

LATE - FILED COMMENTS

1. Fraternal Order of Police
2. KRXV, Inc.
3. John S. La Tour
4. MHS Holdings, Ltd.
5. Mount Wilson FM Broadcasters, Inc.
6. National Association of Broadcasters Supplement (NAB Study)

COMMENTS FILED IN RESPONSE TO NAB STUDY

1. Center for Studies of Law in Action
2. Columbia Bible College Broadcasting Company
3. Federal Trade Commission
4. GEICO
5. Hilton Hotels Corporation
6. Integra
7. John S. La Tour
8. MHS Holdings, Ltd.
9. National Association of Chiefs of Police

10. North Carolina Department of Commerce Travel and Tourism
11. Pleasant Broadcasters, Incorporated
12. Scripps Howard Broadcasting Company
13. Gerard A. Turro

REPLY COMMENTS FILED IN RESPONSE TO THE NAB STUDY

1. California Department of Transportation
2. Connecticut State Police
3. Delaware Tourism Office
4. Domino's Pizza
5. Hall of Fame, International, Central Missouri State University
6. Idaho Transportation Department
7. John S. La Tour
8. Louisiana Office of Tourism
9. MHS Holdings, Ltd
10. Michigan Department of State Police
11. Minnesota Department of Transportation
12. Minnesota State Patrol Division
13. National Association of Broadcasters
14. National Association of Chiefs of Police
15. New Hampshire Division of State Police
16. New Mexico State Highway & Transportation Department
17. Ohio Department of Highway Safety
18. Oregon Department of Economic Development Tourism Division
19. South Carolina Highway Patrol
20. Utah Department of Public Safety
21. Vermont State Police
22. White Mountain Attractions
23. Wisconsin State Patrol

APPENDIX B

Proposed Rule Section

It is proposed to amend Title 47 CFR Parts 1, 73, and 74 as follows:

1. The authority citation for Parts 1, 73, and 74 would continue to read as follows:

Authority: 47 U.S.C. 154 and 303

2. Section 1.1307, paragraph (b), would be amended by revising Note 1 as follows:

Section 1.1307 Actions which may have a significant environmental effect, for which environmental assessments (EAs) must be prepared.

* * * * *

(b) * * *

Note 1 Paragraph (b) shall apply to facilities and operations licensed or authorized under the following Parts of the Commission's Rules: 5, 25, 73, 74 (Subpart A), 74 (Subpart G), 74 (Subpart L, applies only to stations that exceed 10 watts ERP), and 80 (applies only to ship earth stations) Facilities and operations licensed or authorized under all other Parts, Subparts, or Sections of the Commission's Rules shall be categorically excluded from consideration under paragraph (b), unless such exclusion is superseded by actions taken by the Commission under the provisions of paragraphs (c) or (d) of this Section

* * * * *

3. Section 73.3573(a)(1) would be amended by revising the section heading, by deleting the fourth sentence in paragraph (a)(1), by redesignating the Note at the end of the section as Note 1, and by adding a Note 2. to read as follows

Section 73.3573(a)(1) Processing FM broadcast station applications.

(a) * * *

(1) Other requests for change in frequency or community of license for FM stations must first be submitted in the form of a petition for Rule Making to amend the Table of Allotments. For noncommercial educational FM stations a major change is any change in frequency or community of license or any change in power or antenna location or height above average terrain (or combination thereof) which would result in a change of 50 percent or more in the area within the station's predicted 1 mV/m field strength contour. * * *

* * * * *

Note 1: Processing of applications for new low power educational FM applications.

* * * * *

Note 2: For rules on processing FM translator and booster stations, see Section 74.1233 of this chapter.

4. Section 74.1201 would be amended by adding paragraphs (g), (h) and (i) to read as follows:

Section 74.1201 Definitions.

* * * * *

(g) Translator coverage area. The area encompassed by the predicted 1 mV/m field strength contour of an FM translator station without regard to the operating channel of the translator station.

(h) Fill in area. The area where the coverage contour of an FM translator or booster station is within the protected contour of the associated primary station (i.e., predicted

0.5 mV/m contour for commercial Class B stations, predicted 0.7 mV/m contour for commercial Class B1 stations, and predicted 1 mV/m contour for all other classes of stations).

(i) Other area. The area where the coverage contour of an FM translator station extends beyond the protected contour of the primary station (i.e., predicted 0.5 mV/m contour for commercial Class B stations, predicted 0.7 mV/m contour for commercial Class B1 stations, and predicted 1 mV/m contour for all other classes of stations).

5. Section 74.1202 would be amended by revising paragraphs (b), (b)(1) and (2), by deleting paragraphs (c) and (d), by redesignating paragraph (e) as paragraph (c), by adding a new paragraph (d), and by revising the Note to this Section to read as follows:

Section 74.1202 Frequency assignment.

(b) Subject to compliance with all the requirements of this subpart, FM broadcast translators may be authorized to operate on the following FM channels, regardless of whether they are assigned for local use in the FM Table of Allotments (§73.202(b) of this chapter).

(1) Commercial FM translators: Channels 221-300

(2) Noncommercial FM translators: Reserved channels 200-220, subject to the restrictions specified in Section 73.501 of this chapter, and Channels 221-300.

(c) An FM broadcast booster station will be assigned the channel assigned to its primary station.

(d) An application for an FM translator station located within 53 or 54 channels of an FM radio broadcast station will not be accepted for filing if it fails to meet the required separation distance set out in §73.207. For purposes of determining compliance with §73.207, translator stations will be treated as Class A stations; provided, however, that translator stations operating with 10 watts or less ERP will be treated as Class D stations and will not be subject to intermediate frequency separation requirements.

Note: See Section 74.1235 for further restrictions imposed on translators and boosters located within 320 kilometers (approximately 199 miles) of either the Canadian or Mexican borders.

6. Section 74.1203 would be revised to read as follows:

Section 74.1203 Interference.

(a) There are two types of interference - predicted and actual. In the case of predicted interference, an application for an FM translator station will not be accepted for filing if the proposed operation would involve overlap of signal strength contours with any other station, including FM translators and Class D (secondary) noncommercial educational FM stations, as set forth below:

(1) Commercial Class B FM Stations (Protected Contour: 0.5 mV/m)

Frequency separation	Contour of proposed translator station	Contour of commercial Class B station
Co-channel	0.05 mV/m (34 dBu)	0.5 mV/m (54 dBu)
200 kHz	0.25 mV/m (48 dBu)	0.5 mV/m (54 dBu)
400 kHz	5.00 mV/m (74 dBu)	0.5 mV/m (54 dBu)
600 kHz	50.0 mV/m (94 dBu)	0.5 mV/m (54 dBu)

(2) Commercial Class B1 FM Stations (Protected Contour: 0.7 mV/m)

Frequency separation	Contour of proposed translator station	Contour of commercial Class B1 station
Co-channel	0.07 mV/m (37 dBu)	0.7 mV/m (57 dBu)
200 kHz	0.35 mV/m (51 dBu)	0.7 mV/m (57 dBu)
400 kHz	7.00 mV/m (77 dBu)	0.7 mV/m (57 dBu)
600 kHz	70.0 mV/m (97 dBu)	0.7 mV/m (57 dBu)

(3) All Other Classes of FM Stations, including FM translators (Protected Contour: 1 mV/m)

Frequency separation	Contour of proposed translator station	Contour of any other stations
Co-channel	0.1 mV/m (40 dBu)	1 mV/m (60 dBu)
200 kHz	0.5 mV/m (54 dBu)	1 mV/m (60 dBu)
400 kHz	10 mV/m (80 dBu)	1 mV/m (60 dBu)
600 kHz	100 mV/m (100 dBu)	1 mV/m (60 dBu)

Note: An application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

(b) The following standards must be used to compute the distances to the pertinent contours.

(1) The distance of the contours being protected are to be computed using Figure 1 of §73.333 [F(50,50) curves] of this part.

(2) The distance to the interference contours are to be computed using Figure 1a of §73.333 [(F)(50,10) curves]. In the event that the distance to the contour is below 16 kilometers (approximately 10 miles), and therefore not covered by Figure 1a, curves in Figure 1 must be used.

(3) The effective radiated power (ERP) that is the maximum ERP for any elevation plane on any bearing will be used.

(4) The antenna height to be used is the height of the radiation center above the average terrain along each pertinent radial.

(c) An application for a change (other than a change in channel) in the facilities of an FM translator station will be accepted even though overlap of signal strength contours would occur with another station in an area where such overlap does not already exist, if

(1) The total area of overlap with that station would not be increased;

(2) The area of overlap with any other station would not increase;

(3) The area of overlap does not move significantly closer to the station receiving the overlap; and,

(4) No area of overlap would be created with any station with which the overlap does not now exist.

(d) The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water.

(e) An application for an FM translator station will not be accepted for filing even though the proposed operation would not involve overlap of signal strength contours with any other station, as set forth in Section 74.1203(a) above, if the predicted 1 mV/m field strength contour of the FM translator station will overlap a populated area already receiving a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, including Class D (secondary) noncommercial educational FM stations and grant of the authorization will result in interference to the reception of such signal

(f) In the case of actual interference an authorized FM translator or booster station will not be permitted to continue to operate if it causes any interference to

(1) the transmission of any authorized broadcast station; or

(2) the reception of the input signal of any television translator, television booster, FM translator or FM booster station; or

(3) the direct reception by the public of the off-the-air signals of any authorized broadcast station including Class D (secondary) noncommercial educational FM stations, regardless of the quality of such reception, the strength of the signals so used, or the channel on which the protected signal is carried

(g) For purposes of Section 74.1203(f)(3) interference to the direct reception of an off-the-air signal will be deemed to occur upon the receipt by the Commission of a significant number of valid and substantiated complaints or upon receipt of such other proof establishing the fact of actual interference

(h) An FM booster station will be exempt from the provisions of paragraph (f) of this section to the extent it may cause limited interference to its primary station's signal subject to the conditions of paragraph (k) of this section

(i) If interference cannot be promptly eliminated by the application of suitable techniques, operation of the offending translator station or booster station shall be immediately suspended and shall not be resumed until the interference has been eliminated. Short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures. If a complainant refuses to permit the translator or booster licensee to apply remedial techniques which demonstrably will eliminate the interference without impairment to the original reception, the licensee of the translator or booster is absolved of further responsibility for that complaint.

(j) It shall be the responsibility of the licensee of an FM translator station or FM booster station to correct any condition of interference which results from the radiation of radio frequency energy by its equipment on any frequency outside the assigned channel. Upon notice by the Commission to the station licensee or operator that such interference is being caused, the operation of the translator station or booster station shall be immediately suspended and shall not be resumed until the interference has been eliminated or it can be demonstrated that the interference is not due to spurious emissions by the FM translator station or FM booster station; provided, however, that short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.

(k) An FM booster station may not disrupt the existing service of its primary station nor may it cause interference to the signal provided by the primary station within the boundaries of the principal community to be served.

7. Subpart L would be amended by adding new Section 74.1204 to read as follows:

Section 74.1204 TV Channel 6 protection.

The provisions of this section apply to all applications for construction permits for new or modified facilities for NCE-FM translator stations on Channels 200-220

(a) Affected TV Channel 6 Station. An affected TV Channel 6 station is a TV broadcast station which is authorized to operate on Channel 6 that is located within the following distances of a NCE-FM translator station operating on Channels 201-220:

TABLE A

NCE-FM channel	Distance (kilometers)	NCE-FM channel	Distance (kilometers)
201	265	211	196
202	257	212	195
203	246	213	193
204	235	214	187
205	225	215	180
206	211	216	177
207	196	217	174
208	196	218	166
209	196	219	159
210	196	220	154

(b) Collocated Stations. An application for a NCE-FM translator station operating on Channels 201-220 and located at 0.4 kilometer (approximately 0.25 mile) or less from a TV Channel 6 station will be accepted if it includes a certification that the applicant has coordinated its antenna with the affected TV station

(c) Calculation of Predicted Interference. Predictions of interference required under this section are made as follows.

(1) The distances to the TV Channel 6 field strength contours will be predicted according to the procedures specified in Section 73.684 "Prediction of coverage," using the F(50,50) curves in Figure 9, Section 73.699.

(2) For each TV Channel 6 field strength contour, there will be an associated F(50,10) FM translator interference contour the value of which (in units of dBu) is defined as the sum of the TV Channel 6 field strength (in dBu) and the appropriate undesired-to-desired (U/D) signal ratio (in dB) obtained from Figures 1 and 2, Section 73.599, corresponding to the channel of the NCE-FM translator applicant and the appropriate F(50,50) field strength contour of the TV Channel 6 station.

(3) The distances to the applicable NCE-FM translator interference contours will be predicted according to the procedures specified in Section 73.313 "Prediction of Coverage" using the proposed antenna height and horizontally polarized, or horizontal equivalent of the vertically polarized, effective radiated power in the pertinent direction and the F(50,10) field strength curves (Figure 1a, Section 73.333).

(4) The predicted interference area will be defined as the area within the TV Channel 6 station's 47 dBu field strength contour that is bounded by the locus of intersections of a series of TV Channel 6 field strength contours and the applicable NCE-FM translator interference contours.

(5) In cases where the terrain in one or more directions departs widely from the surrounding terrain average (for example, an intervening mountain), a supplemental showing may be made. Such supplemental showings must describe the procedure used and should include sample calculations. The application must also include maps indicating the predicted interference area for both the regular method and the supplemental method.

(d) Channel 200 Applications. No application for use of NCE-FM Channel 200 will be accepted if the requested facility would cause objectionable interference to TV Channel 6 operations. Such objectionable interference will be considered to exist whenever the 15 dBu contour based on the F(50,10) curves in Section 73.333, Figure 1(a) would overlap the 40 dBu contour based on the F(50,50) curves in Section 73.699, Figure 9.

8. Section 74.1231 would be amended by revising paragraph (b), and adding an accompanying Note, revising the text of existing paragraphs (c), (e), (f), (g), and (h), and an accompanying Note to (h), and deleting paragraph (i) by incorporating it into (c) to read as follows:

Section 74.1231 Purpose and permissible service

(b) An FM translator may be used for the purpose of retransmitting the signals of a primary FM radio broadcast station or another translator station which have been received directly through space, converted, and suitably amplified. However, a noncommercial educational FM translator station operating on a reserved channel (Channel 200-220) and owned and operated by the licensee of the primary noncommercial educational FM station it rebroadcasts may use alternative signal delivery means, including, but not limited to, satellite and terrestrial microwave facilities. A commercial FM translator providing fill-in service may use terrestrial microwave facilities. Booster stations may also receive the signals of primary broadcast service stations through alternative signal delivery means, including, but not limited to, satellite and terrestrial microwave facilities.

Note. For paragraphs (b) and 74.1231(h) auxiliary intercity relay microwave frequencies may be used to deliver signals to FM translator and booster stations on a secondary basis only. Such use shall not interfere with or otherwise preclude use of these broadcast auxiliary stations from transmitting aural programming between broadcast stations as provided in paragraphs 74.531(a) and (b). Prior to filing an application for an auxiliary intercity relay microwave frequency, the applicant shall notify the appropriate frequency coordination committee, or any licensees assigned the use of the proposed operating frequency in the intended location or area of operation, of the proposed operating frequency.

(c) The transmissions of each FM translator or booster station shall be intended only for direct reception by the general public. An FM translator or booster shall not be operated solely for the purpose of relaying signals to one

or more fixed received points for retransmission, distribution, or further relaying in order to establish a point-to-point FM radio relay system.

(e) An FM translator shall not deliberately retransmit the signals of any station other than the station it is authorized to retransmit. Precautions shall be taken to avoid unintentional retransmission of such other signals.

(f) A locally generated radio frequency signal similar to that of an FM broadcast station and modulated with aural information may be connected to the input terminals of such FM translators for the purpose of transmitting voice announcements. The radio frequency signals shall be on the same channel as the normally used off-the-air signal being rebroadcast. Connection of the locally generated signals shall be made automatically by means of a time-switch when transmitting originations concerning financial support. The connection for emergency transmissions may be made manually. The apparatus used to generate the local signal that is used to modulate the FM translator must be capable of producing an aural signal which will provide acceptable reception on FM receivers designed for the transmission standards employed by FM broadcast stations.

(g) The aural material transmitted as permitted in paragraph (f) of this section shall be limited to emergency warnings of imminent danger and to seeking or acknowledging financial support deemed necessary to the continued operation of the translator. Originations concerning financial support are limited to a total of 30 seconds an hour. Within this limitation the length of any particular announcement will be left to the discretion of the translator station licensee. Solicitations of contributions shall be limited to the defrayal of the costs of installation, operation and maintenance of the translator or acknowledgements of financial support for those purposes. Emergency transmissions shall be no longer or more frequent than necessary to protect life and property.

(h) FM broadcast booster stations provide a means whereby the licensee of an FM broadcast station may provide service to areas in any region within the primary station's predicted, authorized service contours. An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmissions, except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.

Note: In the case of an FM broadcast station authorized with facilities in excess of those specified by Section 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.

9. Section 74.1232 would be amended by revising paragraph (b) and adding a Note, by revising paragraph (d), removing the notes following paragraph (d) and adding a

new note to paragraph (d), adding new paragraph (e), by redesignating and revising existing paragraphs (e) through (g) as paragraphs (f) through (h) to read as follows:

Section 74.1232 Eligibility and licensing requirements.

(b) More than one FM translator may be licensed to the same applicant, whether or not such translators serve substantially the same area, upon an appropriate showing of technical need for such additional stations. FM translators are not counted as FM stations for the purpose of Section 73.3555, concerning multiple ownership.

Note: As used in this section need refers to the quality of the signal received and not to the programming content, format, or transmission needs of an area.

(d) An authorization for a commercial FM translator whose predicted 1 mV/m field strength contour extends beyond the protected contour of the primary station will not be granted to the licensee or permittee of an FM radio broadcast station. For the purposes of this subpart, the protected contour of the primary station shall be defined as follows: Commercial Class B and B1 stations will be protected to their predicted 0.5 mV/m and 0.7 mV/m contours, respectively, as specified in Section 73.215 of the Commission's rules; all other FM radio broadcast stations will be protected to their predicted 1 mV/m field strength contour. The 1 mV/m contour shall be as predicted in accordance with Section 73.313(a) through (d) of this chapter. In the case of an FM radio broadcast station authorized with facilities in excess of those specified by Section 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast, as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.

(e) A commercial FM translator station whose predicted 1 mV/m field strength contour goes beyond the protected contour of the primary station shall not receive any support, before or after construction, either directly or indirectly, from any FM radio broadcast station.

(f) An FM broadcast booster station will be authorized only to the licensee or permittee of the FM radio broadcast station whose signals the booster station will retransmit, to serve areas within the protected contour of the primary station, subject to Note, Section 74.1231(h).

(g) No numerical limit is placed upon the number of FM booster stations which may be licensed to a single licensee. A separate application is required for each FM booster station. FM broadcast booster stations are not counted as FM broadcast stations for the purposes of Section 73.5555 concerning multiple ownership.

(h) Any authorization for an FM translator station issued to an applicant described in paragraphs (d) and (e) of this section will be issued subject to the condition that it may be terminated at any time, upon not less than sixty (60) days written notice, where the circumstances in the community or area served are so altered as to have prohibited grant of the application had such circumstances existed at the time of its filing.

10. Subpart L would be amended by adding new Section 74.1233 to read as follows:

Section 74.1233 Processing FM translator and booster station applications.

(a) Applications for FM translator and booster stations are divided into two groups:

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. In the case of FM translator station changes a major change is any change in frequency (output channel), or change in area to be served greater than ten percent of the previously authorized 1 mV/m contour. All other changes will be considered minor. All major changes are subject to the provisions of Sections 73.3580 and 1.1104 of the rules pertaining to major changes.

(2) In the second group are applications for licenses and all other changes in the facilities of the authorized station.

(b) Applications for FM translator and booster stations will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after publication) on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and/or petitions to deny the listed applications must be filed.

(c) In the case of an application for an instrument of authorization, other than a license pursuant to a construction permit, grant will be based on the application, the pleadings filed, and such other matters that may be officially noticed. Before a grant can be made it must be determined that:

(1) There is not pending a mutually exclusive application filed in accordance with paragraph (b) of this section.

(2) The applicant is legally, technically, financially and otherwise qualified.

(3) The applicant is not in violation of any provisions of law, the FCC rules, or established policies of the FCC; and

(4) A grant of the application would otherwise serve the public interest, convenience and necessity.

(d) Applications for FM translator stations proposing to provide fill-in service (within the primary station's protected contour) of the commonly owned primary station will be given priority over all other applications.

(e) Where applications for FM translator stations are mutually exclusive and do not involve a proposal to provide fill-in service of a commonly owned primary station, the FCC may stipulate different frequencies as necessary for the applicants.

(f) Where there are no available frequencies to substitute for a mutually exclusive application, the FCC will base its decision on the following priorities: (1) first full-time aural service; (2) second full-time aural service; and (3) other public interest matters including, but not limit-

ed to the number of aural services received in the proposed service area, the need for or lack of public radio service, and other matters such as the relative size of the proposed communities and their growth rate.

11 Section 74.1235 would be amended by revising the section heading, by revising paragraph (a), by deleting paragraphs (a)(1) through (a)(4), by adding new paragraphs (b) through (d), and by redesignating existing paragraphs (b) and (c) as paragraphs (f) and (g), to read as follows:

Section 74.1235 Power limitations and antenna systems.

(a) The maximum allowable ERP in any direction shall be such that the distance to the 1 mV/m (60 dBu) field strength contour of the FM translator shall not exceed 16 kilometers (approximately 10 miles) from the proposed transmitter site. The antenna height above average terrain shall be computed along each of 12 distinct radials, with each radial spaced 30 degrees apart and with the bearing of the first radial being true north; provided, however, that in no event shall the ERP of the translator station exceed 1 kW. For example:

ERP (watts)	HAAT (meters)
1000	77
600	98
500	107
50	340
10	860

(b) Composite antennas and antenna arrays may be used where the total ERP does not exceed the maximum specified in subpart (a) of this Section.

(c) Either horizontal, vertical, circular or elliptical polarization may be used provided that the supplemental vertically polarized ERP required for circular or elliptical polarization does not exceed the ERP otherwise authorized. Either clockwise or counterclockwise rotation may be used. Separate transmitting antennas are permitted if both horizontal and vertical polarization is to be provided.

(d) All applications must be filed in compliance with Sections 73.316(d)-(h) of this Chapter.

(e) Additionally, applicants planning to use directional antennas must comply with Section 73.316(c)(1)-(3). Prior to issuance of a license, the applicant must: 1) certify that the antenna is mounted in accordance with the specific instructions provided by the antenna manufacturer; and 2) certify that the antenna is mounted in the proper orientation. In instances where a directional antenna is proposed for the purpose of providing protection to another facility, a condition may be included in the construction permit requiring that before program tests are authorized, a permittee: 1) must submit the results of a complete proof-of-performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components; and, 2) must certify that the relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value indicated on the composite radiation pattern authorized by this construction permit.

(f) In no event shall a station authorized under this subpart be operated with a power output in excess of the transmitter type-accepted rating.

(g) The output power of FM booster stations shall be limited such that the predicted service contour of such stations computed in accordance with Section 73.313 (a) - (d), may not extend beyond the area covered by the predicted service contour of the primary station that they rebroadcast and that such output power may not exceed 20 percent of the maximum allowable effective radiated power for the primary station's class. Further, FM booster stations shall be subject to the requirement that the signal of any first adjacent channel station must exceed the signal of the booster station by 6 dB at all points within the protected contour of any first adjacent channel station, except that in the case of FM stations on adjacent channel spacings that do not meet the minimums specified in Section 73.207, the signal of any first adjacent channel station must exceed the signal of the booster by 6 dB at any point within the predicted interference free contour of the adjacent channel station.

(h) Reserved.

(i) Applicants for FM translator stations located within 320 km of the Canadian border may operate with no more than 50 watts effective radiated power in any direction within an interference contour (34 dBu) not to exceed 34 km. FM translator stations located within 320 kilometers of the Mexican border must be separated from Mexican allotments and assignments in accordance with Section 73.207(b)(3) of this chapter. For purposes of compliance with that section, FM translators will be considered as Class D FM stations.

12 Section 74.1236 would be amended by revising paragraph (a) to read as follows:

Section 74.1236 Emission and bandwidth.

(a) The license of a station authorized under this subpart allows the transmission of each F3 or other types of frequency modulation (see §2.201) upon a showing of need as long as the emission complies with the following:

13. Section 74.1237 would be amended by revising paragraph (d) to read as follows:

§74.1237 Antenna location.

(d) The transmitting antenna of a commonly owned FM translator station shall be located within the protected contour of its FM station, subject to Note, Section 74.1231(h).

14. Section 74.1250 would be revised to read as follows:

Section 74.1250 Transmitters and associated equipment.

(a) FM translator and booster transmitting apparatus used by stations authorized under the provisions of this subpart must be type accepted or notified upon the request of any manufacturer of transmitters following the procedures described in Section 73.1660 and Subpart J of Part 2. If acceptable, the transmitter will be included in the FCC's "Radio Equipment List, Equipment Acceptable for Licensing."

(b) Transmitting antennas, antennas used to receive signals to be rebroadcast, and transmission lines are not subject to the requirement for type acceptance.

(c) The local oscillator or oscillators used in the exciter to provide a locally generated and modulated input signal to the translator, when subjected to variations in ambient temperature between minus 30 [°d] and plus 50 [°d] centigrade, and in primary supply voltage between 85 percent and 115 percent of the rated value, shall be sufficiently stable to maintain the output center frequency of the exciter within plus or minus 0.005 percent of the frequency assigned to the primary station.

(1) Automatic means shall be provided for limiting the level of the audio frequency voltage applied to the modulator to ensure that a frequency swing in excess of 75 kHz will not occur under any condition of the modulation.

15 Section 74.1251 would be amended by revising the section heading, revising paragraphs (b), (b)(7), (b)(8), removing paragraph (b)(9), and adding paragraph (c) to read as follows:

Section 74.1251 Technical and equipment modifications.

* * * * *

(b) Formal application on FCC Form 349 is required of all permittees and licensees for any of the following changes

* * * * *

(7) Any change of authorized effective radiated power

(8) Any change in area being served.

(c) Changes in the primary FM station being retransmitted must be submitted to the FCC in writing.

16 Section 74.1261 would be revised to read as follows:

Section 74.1261 Frequency tolerance.

(a) The licensee of an FM translator or booster station with an authorized transmitter output power greater than 10 watts shall maintain the center frequency at the output of the translator within 0.01 percent of its assigned frequency.

(b) The licensee of an FM translator or booster station with an authorized transmitter power 10 watts or less shall maintain the center frequency at the output of the translator or booster station in compliance with the requirement of Section 73.1545(b)(2).

17. Section 74.1263 would be amended by revising paragraph (a), revising and redesignating existing paragraph (c) as paragraph (b), adding new paragraphs (c) and (d), redesignating existing paragraph (b) as paragraph (e) and revising the text of that paragraph to read as follows:

Section 74.1263 Time of operation.

(a) The licensee of an FM translator or booster station is not required to adhere to any regular schedule of operation. However, the licensee of an FM translator or

booster station is expected to provide a dependable service to the extent that such is within its control and to avoid unwarranted interruptions to the service provided.

(b) An FM translator or booster station rebroadcasting the signal of a primary station shall not be permitted to radiate during extended periods when signals of the primary station are not being retransmitted.

(c) The licensee of an FM translator or booster station must notify the Commission of its intent to discontinue operations for 30 or more consecutive days. Notification must be made within 48 hours of the time the station first discontinues operation and Commission approval must be obtained for such discontinued operation. The notification shall specify the causes of the discontinued operation and a projected date for the station's return to operation, substantiated by supporting documentation. If the projected date for the station's return operations cannot be met, another notification and further request for discontinued operations must be submitted in conformance with the requirements of this section. Within 48 hours of the station's return to operation, the licensee must notify the Commission of such fact. All notification must be in writing.

(d) The licensee of an FM translator or booster station must notify the Commission of its intent to permanently discontinue operations at least two days before operation is discontinued. Immediately after discontinuance of operation, the licensee shall forward the station license and other instruments of authorization to the FCC, Washington, D.C. for cancellation.

(e) Failure of an FM translator or booster station to operate for a period of 30 or more consecutive days, except for causes beyond the control of the licensee, shall be deemed evidence of permanent discontinuance of operation and the license of the station may be cancelled at the discretion of the Commission.

18. Section 74.1269 would be revised to read as follows:

Section 74.1269 Copies of rules.

The licensee or permittee of a station authorized under this subpart shall have a current copy of Volumes I (Parts 0, 1, 2 and 17) and III (Parts 73 & 74) of the Commission's Rules and shall make the same available for use by the operator in charge. Each such licensee or permittee shall be familiar with those rules relating to stations authorized under this subpart. Copies of the Commission's Rules may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

19. Section 74.1283 would be amended by removing paragraph (a), redesignating existing paragraph (e) as paragraph (a), adding a new paragraph (b), revising paragraphs (c), (c)(1), and (c)(2), and redesignating existing paragraph (b) as paragraph (d) and existing paragraph (d) as paragraph (e), to read as follows:

Section 74.1283 Station identification.

(a) The call sign of an FM broadcast translator station will consist of the initial letter K or W followed by the channel number assigned to the translator and two letters. The use of the initial letter will generally conform to the pattern used in the broadcast service. The two letter com-

binations following the channel number will be assigned in order and requests for the assignment of particular combinations of letters will not be considered.

(b) The call sign of an FM booster station will consist of the call sign of the primary station followed by the letters "FM" and the number of the booster station being authorized, e.g., WFCF-FM-1.

(c) A translator station authorized under this subpart shall be identified in one of the following methods.

(1) By arranging for the primary station whose station is being rebroadcast to identify the translator station by call sign and location. Three such identifications shall be made during each day: once between 7 a.m. and 9 a.m., once between 12:55 p.m. and 1:05 p.m. and once between 4 p.m. and 6 p.m. Stations which do not begin their broadcast before 9 a.m. shall make their first identification at the beginning of their broadcast days. The licensee of an FM translator whose station identification is made by the primary station must arrange for the primary station licensee to keep in its file, and available to FCC personnel, the translator's call letters and location, giving the name, address and telephone number of the licensee or his service representative to be contacted in the event of malfunction of the translator. It shall be the responsibility of the translator licensee to furnish current information to the primary station licensee for this purpose.

(2) By transmitting the call sign in International Morse Code at least once each hour. Transmitters of FM broadcast translator stations of more than 1 watt transmitter output power must be equipped with an automatic keying device that will transmit the call sign at least once each hour, unless there is in effect a firm agreement with the translator's primary station as provided in §74.1283(c)(1). Transmission of the call sign can be accomplished by:

(i) Frequency shifting key; the carrier shift shall not be less than 5 kHz nor greater than 25 kHz.

(ii) Amplitude modulation of the FM carrier of at least 30% modulation. The audio frequency tone use shall not be within 200 hertz of the Emergency Broadcast System Attention signal alerting frequencies.

(d) FM broadcast booster stations shall be identified by their primary stations, by the broadcasting of the primary station's call signs and location, in accordance with the provisions of Section 73.1201 of this chapter.

(e) The Commission may, in its discretion, specify other methods of identification.

APPENDIX C

Initial Regulatory Flexibility Act Analysis

Pursuant to the Regulatory Flexibility Act of 1980, the Commission finds:

I. *Reason for Action* In response to seven petitions for rule making, the Commission issued a *Notice of Inquiry (NOI)*, 3 FCC Rcd 3664 (1988), to study the role of FM translators in the radio broadcast service. Because the petitioners sought varying and conflicting changes to our rules, we found that a broad reexamination of our policies regarding the authorization and operation of FM translators would be timely and appropriate. Therefore, the *NOI* sought comment on all aspects of our general

policies regarding FM translators, as well as on specific proposals for revisions to our rules. Based on the comments received in response to the *NOI* and our own analysis of FM translator matters, we conclude that our existing regulatory structure should be revised in order to satisfy the intended purposes of the FM translator service. We find there is a need to clarify and tighten several of our rules in order to ensure that FM radio broadcast stations are not adversely impacted by translator operations. We also have determined that our FM translator rules can be modified to provide better service to listeners. The Commission's objective, consistent with its mandate under the Communications Act of 1934, as amended, is to provide service to the public to the greatest extent possible consistent with its concern that any action taken does not interfere with existing radio service.

II. *Objectives*. The Commission is reexamining its FM translator policies to determine whether the existing regulatory scheme is the most effective use of the FM radio service.

III. *Legal Basis*. Authority for action as proposed in this rule making proceeding is provided in Sections 4(i) and 303 of the Communications Act of 1934, as amended.

IV. *Description, potential impact and number of small entities affected*. The number of entities affected will depend on the action we ultimately take regarding the FM translator service. FM translators could be affected, for example, by changing the technical standards concerning maximum permissible power, and by prohibiting any financial support from the primary station to any commercial FM translators in other areas. We observe that currently there are 1,769 FM translators on the air and construction permits for another 318 FM translators have been granted by the Commission.

V. *Reporting, record keeping and other compliance requirements*. None.

VI. *Federal rules which overlap, duplicate or conflict with this rule*. None.

VII. *Any significant alternatives minimizing impact on small entities and consistent with the stated objectives*. In this proceeding, the Commission intends to consider the full range of options for FM translator service and to pay careful attention to the effects of the various options on small entities, particularly existing FM radio broadcast stations.

FOOTNOTES

¹ Currently, there are 1,803 FM translators on-the-air. *Broadcasting*, February 5, 1990, at p. 18. Construction permits have been granted for another 318 translators.

The current rules also recognize FM booster stations which receive, amplify and retransmit signals on the same frequencies as the FM radio broadcast station. Booster stations are authorized only to the licensee of the primary station they rebroadcast and are limited to operations within the protected contour of that station. The Commission recently revised its FM booster rules to authorize higher power FM boosters and to permit them to rebroadcast signals received by any distribution technology the licensee deems suitable. See *Report and Order* in MM Docket No. 87-13, 2 FCC Rcd 4625 (1987). We will not propose revisions to the rules governing the FM booster service in this Notice.

² An FM radio broadcast station whose signal is rebroadcast by an FM translator is referred to as the "primary station." See 47 CFR §74.1201(d).

³ Recently, the rules were modified to permit licensees of noncommercial educational FM stations operating on reserved channels to use any distribution technology they deem suitable to transmit programming to their own translators subject to certain conditions. See *Report and Order* in MM Docket No. 86-112, 3 FCC Rcd 2196 (1988), *recon. Memorandum Opinion and Order* in MM Docket No. 86-112, FCC 89-216, 4 FCC Rcd 6459 (1989).

⁴ See *Notice of Proposed Rule Making* in Docket No. 17159, 34 FR 761 (1969) *Report and Order* in Docket No. 17159, 20 Rad. Reg. 2c (P&F) 1538 (1970).

⁵ 47 CFR §74.1231(a).

⁶ 20 Rad. Reg. 2d at 1541.

⁷ The FM translator rules are set forth at 47 CFR §§74.1201-74.1284. The Commission also issued a *Guide to FM Translator Rules and Policies* to emphasize the need for translator licensees and applicants to conform to the existing FM translator rules. See *Public Notice*, 55 Rad. Reg. 2d (P&F) 1247 (1984).

⁸ Rule making petitions were filed by the National Association of Broadcasters (NAB), AGK Communications, Inc. (AGK), John Davidson Craver (Craver), John S. La Tour (La Tour), Communications General Corp., Bruce Quinn (Quinn), and Robert Jacoby (Jacoby). These petitions, and responsive comments to them, were discussed in detail in the *VOI*. See 3 FCC Rcd at 3665-3668.

⁹ Appendix A lists parties commenting in this proceeding.

¹⁰ *Order Reopening the Period for Filing Comments* in MM Docket No. 88-140, 3 FCC Rcd 7050 MM Bur. (1988).

¹¹ The existing rule regarding the secondary status of FM translators, which requires that their operation not cause interference to any other broadcast station, will be retained. See 47 CFR §74.1203.

¹² The proposed rules are set forth in Appendix B.

¹³ 20 Rad. Reg. 2d at 1541, para. 6.

¹⁴ 47 CFR §74.1232(d)(1).

¹⁵ 20 Rad. Reg. 2d at 1541, para. 6.

¹⁶ See *Report and Order and Memorandum Opinion and Order* in MM Docket No. 86-112, *supra*. The recently adopted rules require that, during a three-year transition period, applicants for such NCE FM translators proposing to use alternative signal delivery must demonstrate that an alternative frequency providing comparable coverage remains available. Applicants are exempt from making a showing if the proposed translator is either within 80 kilometers (50 miles) of the 1 mV/m contour of the FM radio broadcast station or is greater than 160 kilometers (100 miles) from any NCE FM station.

¹⁷ The Commission's rules state that a translator license may be granted to "any qualified individual, organized group of individuals, or local civil government body" in addition to the licensee of an FM radio broadcast station. See 47 CFR §74.1232(a). This category of licensee will be referred to as an "independent" party.

¹⁸ 20 Rad. Reg. 2d (P&F) at 1541, para. 6.

¹⁹ NAB, Greater Pacific Radio Exchange, Inc. (Greater Pacific), Greater Media, Athens Broadcasting Co. (Athens); WISL and WTSL-FM (WTSL); Alabama Broadcasters Association; Scripps Howard Broadcasting Co. (Scripps Howard), KASI and KCCO (KASI), Lotus Communications Corp. (Lotus), the National Translator Association (NTA), the Virginia Association of

Broadcasters and North Carolina Association of Broadcasters (VAB and NCAB), KRXX, Inc. (KRXX); Kansas Association of Broadcasters (KAB), CGS Communications of Kingman, Inc. (CGS), National Public Radio (NPR); CBS, KTKT and KLPX-FM (reply comments), and New Hampshire Association of Broadcasters (NHAB). London Bridge Broadcasting, Inc. (London Bridge), licensee of an FM station in Arizona, would only authorize translators' operations outside the primary station's 1 mV/m contour if they do not intrude upon the authorized service contour of two or more commercial broadcast stations, asserting that the presence of two local signals ensures competitive local service.

²⁰ From a policy perspective, NAB argues the advantage of booster service is that boosters operate co-channel to primary stations and cannot be used to extend the FM radio broadcast station's 1 mV/m contour without co-channel or adjacent channel interference to other FM radio broadcast stations.

²¹ E.g., La Tour, the Lew Latto Group of Northland Radio Stations (Latto).

²² NAB (reply) contends that the Commission already has a definition of "underserved," i.e., areas receiving from zero to three daytime or nighttime services" (*Second Further Notice of Inquiry and Notice of Proposed Rule Making* in BC Docket No. 81-742, summarized at 53 FR 31894 (Aug. 16, 1988)). "Underserved" is a factor relevant to Commission evaluation of competing applications for broadcast stations and has never been relied upon as a basis to grant or deny an application for an FM translator license. We see no need to adopt this factor for FM translator service. Moreover, our definitions for "other," and "fill-in" service, discussed *infra*, are more precise terms for defining types of FM translator service.

²³ Throughout this *Notice*, we will refer to these two classifications when we find that the equivalent rule is not appropriate for both categories. When no classification is specified, the proposal will be for all translators.

²⁴ We want to emphasize that under these revised rules, where the predicted service contour of a proposed commercial FM translator would serve an area that meets the fill-in definition in part and the other area definition in part, the primary station would be prohibited from translator ownership.

²⁵ See 47 CFR §74.1232(a).

²⁶ See *First Report and Order* in MM Docket No. 84-231, 100 FCC 2d 1332 (1985).

²⁷ 47 CFR §74.1232(d).

²⁸ The minimum separation distances for FM stations provided in Section 73.207 of the rules reflect protection to the 0.5 and 0.7 mV/m contours for commercial Class B and B1 stations, respectively. See *Report and Order* in BC Docket No. 80-90, 48 FR 29486 (1983). In addition, the Commission's order authorizing high-power FM booster stations permits such stations to provide service to the 0.5 and 0.7 mV/m contours of Class B and B1 stations, respectively. See *Report and Order* in MM Docket No. 87-13, *supra*.

²⁹ To remedy this situation, TBA recommends a protected contour of 0.5 mV/m, increasing the required distance separation from 134 km to 165 km.

³⁰ 47 CFR §74.1232(d)(2). We note that there is no prohibition against financial support by FM station licensees to independent parties for the operation of FM translators either within the primary station's 1 mV/m predicted contour or in areas where there is no predicted FM service.

³¹ 47 CFR §74.1232(d), Note 2.

³² We noted that, in 1970, the Commission adopted these restrictions on translators owned or operated by FM radio broadcast stations in order to lessen the impact these translators might have if they expanded their area of coverage to markets already served by other FM radio broadcast stations. In this regard, the Commission was concerned about the adverse impact translators could have on small, marginally profitable stations located in small markets or rural areas. 20 Rad. Reg. 2d (P&F) at 1541, para. 6.

³³ By "third party" translator licensee, NAB refers to "entrepreneurs" seeking to turn the operation of the FM translator into a profitable business operation.

³⁴ CBS, KASI; KRVX, KTKT and KLPX-FM (reply) Lotus, KNOT, Greater Media, CGS Communications of Kingman, Inc (CGS), VAB and NCAB, WTSL; Slatton-Quick Co. Inc (Slatton-Quick); and Jon R. Swett, a broadcast engineer.

³⁵ London Bridge would prohibit all financial support from the primary station to third-party owned translators because, in practice, there is no limit on operational support the primary station can provide, and payments for maintenance and operation amortize the original construction cost which the primary station was not allowed to provide outright. TBA concurs. Similarly, Greater Pacific alleges that some third-party translator operators "lease" the translators to primary stations in exchange for cash payments and advertising on the primary station, and use the revenues thus derived to recover amounts in excess of the translators' operation and maintenance costs.

³⁶ We do not propose to impose a financial support restriction on NCE FM translators.

³⁷ Until the issue of support is finally resolved, we will continue to defer action on all pending applications which raise questions bearing on this issue.

³⁸ 47 CFR §74.1231(g).

³⁹ *Id.*

⁴⁰ See *Guide to FM Translator Rules and Policies*, 55 Rad. Reg. 2d (P&F) at 1248. This policy against profit-making from translator operation was not codified in the rules. Any new rules we may adopt in this proceeding will of course supersede any guidelines set forth in the *Guide to FM Translator Rules and Policies*, *supra*.

⁴¹ See FCC Public Notice, FCC 86-161, April 11, 1986.

⁴² NAB, CBS, KRXV, KASI, VAB and NCAB, NHAB, Lotus, London Bridge, Greater Pacific, Athens and KYSM.

⁴³ La Tour, Craver, and Bruce Elving (Elving), a translator permittee.

⁴⁴ See 47 CFR §§74.1201(a), 74.1231(a) and 74.1284(a).

⁴⁵ 47 CFR §74.1231(g).

⁴⁶ 47 CFR §74.1284(b). See *Guide to FM Translator Rules and Policies*, 55 Rad. Reg. 2d (P&F) at 1248.

⁴⁷ La Tour, Craver, Jacoby and Quinn.

⁴⁸ CBS; Lotus, NTA, Scripps-Howard, VAB and NVAB, TBA, NewCity Communications, Inc. (NewCity); KASI, Seven Ranges Radio, Greater Media, St. Marie Communications, KNEN, Radio One, Inc., and the Association for Broadcast Engineering Standards, Inc. (ABES).

⁴⁹ *Voice of Inquiry* in MM Docket No. 87-267, 2 FCC Rcd 5014 (1987).

⁵⁰ The FTC study uses Arbitron's radio market surveys as its source for radio station counts. Stations that are listed in these surveys meet a minimum reporting criterion not required of stations listed in Arbitron's TALO (Total Audience Listening Output) reports. The FTC contends that only those stations that

meet the minimum reporting standard are likely to influence the format decisions of the owners of stations capable of reaching all the listeners in a particular market.

⁵¹ The statistics were derived using Arbitron's Spring 1988 TALO reports which lists all stations receiving diary "mentions" by persons age 12 and above in a given county. Pleasant Broadcasters Incorporated (Pleasant) also uses the TALO report to show that in its county 56 different radio stations are heard. Pleasant contends that introduction of translator service which duplicates programming of one of those 56 stations will neither diversify format nor increase listening. In this regard, Scripps Howard suggests that the potential interference from additional translators in frequency congested areas can actually reduce program service to an area.

⁵² La Tour, Craver, Jacoby, Quinn, Timothy D. Martz (Martz), MHS Holdings, Ltd. (MHS), Latto, Elving and Turro.

⁵³ Some of these commenters propose limiting program authority to services such as travellers' information service (MHS) and consumer "yellow pages" (Jacoby).

⁵⁴ La Tour, Craver, Quinn and Elving. Martz proposes low power translator programming authority in markets with less than two radio stations.

⁵⁵ Latto supports local program origination on translators in small towns where no FM radio broadcast station is licensed and no regular broadcast service is available.

⁵⁶ CBS, NewCity, KASI, Greater Media, and St. Marie Communications.

⁵⁷ See *Second Report and Order* in Docket No. 20735, 69 FCC 2d 240 (1978). The Commission terminated the acceptance of applications for low-power Class D noncommercial stations and required existing Class D stations either to upgrade to Class A facilities or move to nonreserved commercial channels. Class D stations that chose to move to the commercial band no longer had primary status but could only operate on a secondary non-interference basis. In addition, the Commission no longer permitted these stations to remain on their original noncommercial channel, with secondary status.

⁵⁸ On July 28, 1989, Gerard Turro filed a request for waiver of Section 74.1231 of the Commission's Rules to permit his FM translator station to originate local programming. By Public Notice DA 89-933, released August 3, 1989, the Commission requested comment on this waiver petition. In light of the commonality of issues raised by the Turro petition and the instant proceeding, we believe it would be in the public interest to subsume the issues raised by this waiver petition herein. Comments already filed in response to the Public Notice will, therefore, be incorporated into the record of MM Docket No. 88-140.

⁵⁹ NAB and Greater Media. Furthermore, these commenters do not suggest that local service obligations be a condition for program origination authority.

⁶⁰ 47 CFR §74.1231(b).

⁶¹ See *Memorandum Opinion and Order* in MM Docket No. 86-112, *supra*. A proposal to expand this authority to independent-party owned NCE FM translators is contained in the *Further Notice of Proposed Rule Making* in MM Docket No. 86-112, 3 FCC Rcd 2202 (1988).

⁶² Temple, La Tour, CBS, and St. Clair.

⁶³ NAB, NPR, London Bridge, KASI, TBA, and Radio One.

⁶⁴ See 47 CFR §74.502 and §74.1231(b). These frequencies are primarily available for aural intercity relay and studio transmitter links (STL) usage, but are allowed to be used on a secondary basis by FM booster stations and NCE FM translator stations owned and operated by the primary station.

⁶⁵ We previously proposed to permit the use of broadcast auxiliary frequencies by all NCE FM translators. See *Notice of Proposed Rule Making* in MM Docket No. 86-112, 104 FCC 2d 318 (1986), and *Further Notice of Proposed Rule Making* in MM Docket No. 86-112, *supra*.

⁶⁶ NPR, CBS, Family Stations, Greater Media, Fuller-Jeffrey Broadcasting Companies and Lotus would permit at least limited use of these frequencies, NAB opposes the proposal.

⁶⁷ In particular, NPR would allow auxiliary frequency use when (1) the applicant is an FM radio broadcast station located a specified distance from the translator, (2) the frequencies are limited to 18.76-18.62 and 19.10-19.60 GHz, (3) prior coordination with local frequency coordination committees has been effected, and (4) the Commission provides for prompt cessation of translator use upon request of a local broadcaster showing no other frequency is available.

⁶⁸ For fill-in translators, Greater Media would authorize the use of auxiliary frequencies only within the theoretical coverage contour of the primary station. Where the translator is providing service to an unserved community, this commenter suggests that the transmission path be limited to 100 miles to prevent translators from serving areas far from the primary station.

⁶⁹ Authorization on a secondary basis would mean that broadcast auxiliary channels could be used to deliver signals to FM translators only where such use would not interfere with or preclude the use of those channels by aural broadcast stations.

⁷⁰ 47 CFR §74.1231(b) and (c).

⁷¹ VAB and NCAB, Greater Pacific Radio One, NPR, London Bridge, Greater Media, KRXX, NHAB, WTSI, and TBA.

⁷² 47 CFR §74.1232(b).

⁷³ 47 U.S.C. §309(i). Authority to use lotteries was conferred on the Commission by the Communications Amendments Act of 1982, Pub. L. 97-259, 96 Stat. 1087 (1982).

⁷⁴ TBA and La Tour favor the use of lotteries, NAB, NPR (reply) and Seven Ranges Radio oppose the use of lotteries.

⁷⁵ NAB, NPR, Seven Ranges Radio and NTA.

⁷⁶ See paragraph 86, below.

⁷⁷ See BC Docket No. 80-130, 90 FCC 2d 88 (1982). The Commission employs four criteria to compare proposals to amend the FM Table of Allotments. These criteria are: 1) first full-time aural service, 2) second full-time aural service, 3) first local service; and 4) other public interest matters. Consideration of "other public interest matters" includes the number of aural services received in the proposed service area, the number of local services, the need for or lack of public radio service and other matters such as the relative size of the proposed communities and their growth rate. We propose to employ these criteria to evaluate mutually exclusive applications for FM translator stations, with the exception of the "local service" criterion. Since FM translators have no program origination authority, we will not consider whether an applicant will be providing a local service. Thus, we will not consider criterion three, and "the number of local services" will not be considered as one of the "other public interest matters."

⁷⁸ 47 CFR §73.3573(a)(1). As long as the community or area of service (some translator stations are licensed to rural areas with no defined communities) which was initially served continues to be served, and there is only an incidental expansion of service, a proposed modification has been interpreted as a "minor" change.

⁷⁹ This percentage cut-off to define a "major change" in area of coverage was first set forth in *Ted Tucker and Jana Tucker*, 4 FCC Rcd 2816 (1989) (*San Manuel, AZ*).

⁸⁰ See 47 CFR §73.3555.

⁸¹ See *First Report and Order* in MM Docket No. 87-7, 4 FCC Rcd 1723 (1989). Under the modified radio contour overlap rules, the Commission redefined the "principal city contour," the area where the majority of a station's listeners are located. Under the revised rules, common ownership of two or more commercial stations in the same broadcast service is prohibited if their principal city contours overlap -- i.e., a 5 mV/m contour for AM stations and a 3.16 mV/m contour for FM stations. Although the new rules continue to prohibit common ownership of two AM or two FM stations in the same community of license, they now permit dual ownership in some cases within the same ADI market. The revised rules are set forth at 47 CFR §73.3555(a)(1) and (2).

⁸² Our requirement that technical need be demonstrated where more than one translator authorization is desired to serve the same area also obviates the need to apply the contour overlap rules to FM translators.

⁸³ 47 CFR §74.1284(c).

⁸⁴ Craver, Family Stations, CBS, La Tour, NTA, MHS (reply), Tribune Broadcasting (reply), the Rutherford Group (reply), Laito, St. Clair, Elving, and KNKK.

⁸⁵ See *Notice of Inquiry* in MM Docket No. 87-267, *supra*. As a result, the Commission has initiated a number of rule making proceedings. See e.g., *Notice of Proposed Rule Making* in MM Docket No. 89-46 (Policies to Encourage Interference Reduction Between AM Broadcast Stations), 4 FCC Rcd 2430 (1989), *Report and Order* in MM Docket No. 88-376 (Amendment of the Commission's Rules to Improve the Quality of the AM Broadcast Service by Reducing Adjacent Channel Interference and by Eliminating Restrictions Pertaining to the Protected Daytime Contour), 4 FCC Rcd 3835 (1989).

⁸⁶ 47 CFR §74.1202(b)(1) and (2).

⁸⁷ NAB, Laito, KASI, TBA, Greater Media, CBS, NTA, and the Association of Maximum Service Telecasters, Inc. (MST).

⁸⁸ NTA, St. Clair, MHS (reply), the Rutherford Group (reply), Columbia Bible College Broadcasting Company (CBCBC), Hammett & Edison, consulting engineers (H&E), Seven Ranges Radio, Temple, NewCity, La Tour, Craver and Quinn. Quinn asserts that low power FM stations should be allowed to operate on any technically available frequency in the FM band (88.1-107.9 MHz) and that Class D stations should be allowed to operate commercially from 92.1-107.9 MHz.

⁸⁹ 20 Rad. Reg. 2d (P&F) at 1540.

⁹⁰ See *Report and Order* in BC Docket No. 80-90, *supra*.

⁹¹ While a number of parties have petitioned for waiver, in general we have not found the submitted showings of preclusion studies -- i.e., that absolutely no class A channels are available for use -- sufficient to grant these requests. See, e.g., *Translator File No. BPFT-860424TC* (Tooele, UT), application for use of Channel 255, dismissed May 15, 1987, reconsideration pending.

⁹² 47 CFR §74.1235(a).

⁹³ NAB suggests that where antenna heights exceed 30 meters, the FM translator should be required to reduce power for "equivalent coverage" at permissible facilities.

⁹⁴ It adds that if any combination of ERP or HAAT would cause the 1 mV/m contour to extend beyond 5 km, then a map should be required to be filed with the translator application.

⁹⁵ St. Clair, La Tour, MHS and Quinn.

⁹⁶ For example, 1 and 10 watt translators using omnidirectional antennas at a height of 100 feet can provide service to areas with radii of approximately 1.8 km and 3.25 km, respectively. However, most existing translators employ directional antennas and are located on higher ground, thus allowing service to larger geographic areas. Translators with 1 and 10

watts power output that operate in such situations can serve areas between 16 km and 32 km, respectively, from the transmitter site

⁹⁷ See paragraph 18, *supra*.

⁹⁸ Additionally, translators in the border area within 320 kilometers of either the Canadian or Mexican border are subject to further limits, regardless of their location relative to the primary station. We note that under the "U.S.-Mexican FM Broadcast Agreement of 1972," such FM translators may not be authorized with a transmitter output power in excess of 10 watts and they are also subject to the spacing requirements that were formerly imposed on U.S. Class D stations as shown in Section 73.207, Table C, of the Commission's rules. Furthermore, under the "U.S. Canadian Working Arrangement of 1984," FM translator stations may not be authorized with an ERP in excess of 50 watts in any direction. Proposed new rules are being added to advise applicants of these restrictions

⁹⁹ An ERP of 1 kW at 77 meters derives a 1 mV/m contour at 16 km based upon the FCC FM (50,50) chart. We note that if we adopt the proposed coverage area and ERP limitations, it is likely that virtually all the translators currently in operation will fall within the acceptable limits

¹⁰⁰ See *Report and Order* in Gen. Docket No. 87-551, 54 Fed. Reg. 1177 (1989), 54 Fed. Reg. 30548 (1989), 3 FCC Rcd 7332 (1988), and 4 FCC Rcd 1761 (1989)

¹⁰¹ 47 CFR §74.1235

¹⁰² 47 CFR §74.1235

¹⁰³ See *Report and Order* in MM Docket No. 87-121, 4 FCC Rcd 1681 (1989)

¹⁰⁴ See 47 CFR §74.1203(a)-(d)

¹⁰⁵ Although Section 74.1203(b) states that "[i]nterference will be considered to occur whenever reception of a regularly used off-the-air signal by viewers or listeners is impaired by the signals radiated by the translator, regardless of the quality of such reception," the rules do not prescribe a specific method for calculating interference among first, second and third adjacent channel users. In practice, because FM translators, like NCE FM stations, are assigned based on a showing that a proposed facility will not cause interference to any station, the staff uses the specific contour computations and ratios of undesired to desired signal strengths prescribed in Section 73.509 of the Rules to estimate the potential for interference by FM translators. See 47 CFR §73.509

¹⁰⁶ Section 73.207 sets forth the minimum separations standards between classes of FM stations. See 47 CFR §73.207

¹⁰⁷ 47 CFR §73.509

¹⁰⁸ KRXXV, H&E, Craver, TBA, Temple, Seven Ranges Radio, Family Stations, TBA and Scripps Howard.

¹⁰⁹ See 47 CFR §74.703. NPR would additionally require applicants for new translator stations to demonstrate that there would be no prohibited contour overlap with existing FM radio broadcast or translator stations. St. Clair opposes this recommendation, arguing that any requirement for contour calculations or complex engineering studies would be unreasonably burdensome for translator station applicants, given that only 15 to 20 interference complaints are received by the Commission each year.

¹¹⁰ See *Report and Order* in MM Docket No. 87-13, *supra*

¹¹¹ We note that the principal advantages of using separation requirements to predict interference are the simplicity of administration (on a "go-no go") basis, and the production of a more even distribution of assignments. However, we believe that these advantages are outweighed by the failure of distance separations criteria to account for variations in the height of terrain

¹¹² NPR, Family Stations and CBCBC.

¹¹³ See 47 CFR §73.525.

¹¹⁴ See 47 CFR §73.525(e)

¹¹⁵ See *Report and Order* in MM Docket No. 87-13, *supra*

¹¹⁶ 47 CFR Section 73.682(a)(14).

¹¹⁷ Upon adoption of the NOI, we imposed a freeze on applications for commercial FM translators. See 3 FCC Rcd at 3673. Applications for new NCE FM translators seeking assignment to the reserved frequency band were exempt from the freeze in order to permit implementation of the revised noncommercial signal delivery technology rule. See *Report and Order* in MM Docket No. 86-112, *supra*. We took this action because of our concern that the volume of applications for FM translators could increase substantially during the pendency of this proceeding. We believed that this could happen because parties anticipated that we might eventually permit these stations to readily convert from a rebroadcast service to stations authorized to originate programming. We believed that a freeze on the acceptance of applications for new commercial FM translators, or major changes to existing commercial FM translator stations, would prevent our resources from being overburdened and eliminate the possibility of conflict with any policy changes we might ultimately adopt.

¹¹⁸ For the same reasons, we conclude that it is appropriate to continue the freeze on the acceptance of applications for new commercial FM translators, or major changes to existing commercial FM translator stations, until we complete this proceeding. See NOI at para. 62.